

**REAUTHORIZATION OF THE
FEDERAL AVIATION ADMINISTRATION:
PERSPECTIVES OF AVIATION STAKEHOLDERS**

HEARING

BEFORE THE

SUBCOMMITTEE ON AVIATION OPERATIONS,
SAFETY, AND SECURITY

OF THE

COMMITTEE ON COMMERCE,
SCIENCE, AND TRANSPORTATION
UNITED STATES SENATE

ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

MAY 13, 2009

Printed for the use of the Committee on Commerce, Science, and Transportation



U.S. GOVERNMENT PRINTING OFFICE

51-473 PDF

WASHINGTON : 2010

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
Fax: (202) 512-2104 Mail: Stop IDCC, Washington, DC 20402-0001

SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

JOHN D. ROCKEFELLER IV, West Virginia, *Chairman*

DANIEL K. INOUE, Hawaii	KAY BAILEY HUTCHISON, Texas, <i>Ranking</i>
JOHN F. KERRY, Massachusetts	OLYMPIA J. SNOWE, Maine
BYRON L. DORGAN, North Dakota	JOHN ENSIGN, Nevada
BARBARA BOXER, California	JIM DEMINT, South Carolina
BILL NELSON, Florida	JOHN THUNE, South Dakota
MARIA CANTWELL, Washington	ROGER F. WICKER, Mississippi
FRANK R. LAUTENBERG, New Jersey	JOHNNY ISAKSON, Georgia
MARK PRYOR, Arkansas	DAVID VITTER, Louisiana
CLAIRE McCASKILL, Missouri	SAM BROWNBACK, Kansas
AMY KLOBUCHAR, Minnesota	MEL MARTINEZ, Florida
TOM UDALL, New Mexico	MIKE JOHANNNS, Nebraska
MARK WARNER, Virginia	
MARK BEGICH, Alaska	

ELLEN L. DONESKI, *Chief of Staff*

JAMES REID, *Deputy Chief of Staff*

BRUCE H. ANDREWS, *General Counsel*

CHRISTINE D. KURTH, *Republican Staff Director and General Counsel*

PAUL NAGLE, *Republican Chief Counsel*

SUBCOMMITTEE ON AVIATION OPERATIONS, SAFETY, AND SECURITY

BYRON L. DORGAN, North Dakota, <i>Chairman</i>	JIM DEMINT, South Carolina, <i>Ranking</i> <i>Member</i>
DANIEL K. INOUE, Hawaii	OLYMPIA J. SNOWE, Maine
JOHN F. KERRY, Massachusetts	JOHN ENSIGN, Nevada
BARBARA BOXER, California	JOHN THUNE, South Dakota
BILL NELSON, Florida	ROGER F. WICKER, Mississippi
MARIA CANTWELL, Washington	JOHNNY ISAKSON, Georgia
FRANK R. LAUTENBERG, New Jersey	DAVID VITTER, Louisiana
MARK PRYOR, Arkansas	SAM BROWNBACK, Kansas
CLAIRE McCASKILL, Missouri	MEL MARTINEZ, Florida
AMY KLOBUCHAR, Minnesota	MIKE JOHANNNS, Nebraska
MARK WARNER, Virginia	
MARK BEGICH, Alaska	

CONTENTS

Hearing held on May 13, 2009	Page 1
Statement of Senator Dorgan	1
Statement of Senator DeMint	14
Statement of Senator Hutchison	15
Prepared statement	16
Statement of Senator Johanns	16
Statement of Senator Cantwell	17
Statement of Senator Warner	53
Statement of Senator Pryor	55
Statement of Senator Klobuchar	56
Statement of Senator Begich	59
Response to written questions submitted by Hon. Mark Begich to James C. May	59
Statement of Senator Lautenberg	66
Statement of Senator Thune	68

WITNESSES

Charles M. Barclay, A.A.E., President, American Association of Airport Ex- ecutives	3
Prepared statement	5
Hon. Marion C. Blakey, President and CEO, Aerospace Industries Associa- tion	17
Prepared statement	19
James C. May, President and CEO, Air Transport Association of America, Inc. (ATA)	26
Prepared statement	28
Ed Bolen, President and CEO, National Business Aviation Association	45
Prepared statement	47
Patrick Forrey, President, National Air Traffic Controllers Association	70
Prepared statement	73
Captain John Prater, President, Air Line Pilots Association, International	83
Prepared statement	85
Robert Roach, Jr., General Vice President, International Association of Ma- chinists and Aerospace Workers	93
Prepared statement	95
Ken Hall, Vice President-At-Large, Package Division Director, International Brotherhood of Teamsters	98
Prepared statement	99
Tom Brantley, President, Professional Aviation Safety Specialists, AFL-CIO ..	101
Prepared statement	103
William McGlashen, Executive Assistant to the International President, Asso- ciation of Flight Attendants—CWA, AFL-CIO	112
Prepared statement	114

APPENDIX

Hon. Barbara Boxer, U.S. Senator from California, prepared statement	131
Craig Fuller, President, Aircraft Owners and Pilots Association, prepared statement	132
Airport Minority Advisory Council (AMAC), prepared statement	135

IV

	Page
Letter, dated May 12, 2009, to Hon. John D. Rockefeller IV and Hon. Kay Bailey Hutchison, from Greg Principato, President, Airports Council International-North America; James C. May, President and CEO, Air Transport Association; Charles Barclay, President, American Association of Airport Executives; Thomas E. Zoeller, President, National Air Carrier Association; James C. Coyne, President, National Air Transport Association; Henry M. Ogradinski, President and CEO, National Association of State Aviation Officials; and Roger Cohen, President, Regional Airline Association	140
William Horn on Behalf of the Alaska Professional Hunters Association, prepared statement	142
Response to written questions submitted by Hon. Maria Cantwell to:	
Charles M. Barclay, A.A.E.	143
Hon. Marion C. Blakey	143
James C. May	146
Response to written questions submitted by Hon. Mark Begich to James C. May	147
Response to written question submitted by Hon. Maria Cantwell to Ed Bolen	148

REAUTHORIZATION OF THE FEDERAL AVIATION ADMINISTRATION: PERSPECTIVES OF AVIATION STAKEHOLDERS

WEDNESDAY, MAY 13, 2009

U.S. SENATE,
SUBCOMMITTEE ON AVIATION OPERATIONS, SAFETY, AND
SECURITY,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Subcommittee met, pursuant to notice, at 2:15 p.m. in room SR-253, Russell Senate Office Building, Hon. Byron Dorgan, Chairman of the Subcommittee, presiding.

OPENING STATEMENT OF HON. BYRON L. DORGAN, U.S. SENATOR FROM NORTH DAKOTA

Senator DORGAN. We'll call the hearing to order.

This is a hearing of the Aviation Subcommittee of the Commerce, Science, and Transportation Committee.

We appreciate all of you being here today. This is the second hearing on a bill to reauthorize the Federal Aviation Administration. We're in the process of drafting the legislation and we know that it's important for a lot of reasons to a lot of different interests in the aviation sector and the first hearing that we held focused on modernization of the Air Traffic Control System. That's very important, the issue that is sometimes called, "NextGen" or NextGeneration.

It's important for a lot of reasons. The use of fuel, safety, the environment, but what seems of most interest to me is that the technology has marched ahead but the Air Traffic Control System has not, and part of that is the fault of the Congress, part of it is the fault of a bureaucracy and certain Federal agencies that just slow everything down just as a matter of habit, and we want to try to change that.

We want to write a new FAA bill, a reauthorization, that includes modernization and really moves us more quickly than those in the FAA and elsewhere suggest we should. They're talking 2020 or 2025. No reason to be out that far, in my judgment. We ought to get about the business of modernizing the Air Traffic Control System.

We still have a ground-based radar system in this country that can tell you about where an airplane is in the sky, not where an airplane is, about where it is. Might be 5-10 miles from where that dot is. It's about where the airplane is.

The fact is that it exists with your car, it exists with your kids and their cell phones. Using GPS they can know exactly where they are or their friends are or your car is, but we can't with our current Air Traffic Control System. That's almost unbelievable to me.

So we're going to try to modernize it and in doing so, we are wanting to, as we write the FAA Reauthorization Bill, we want to hear from all the sectors and all of the interests on these set of issues.

All the stakeholders, I think, have significant stake in what we do. We've tried to do this before and were not successful. My fervent hope is we can do it now, get it done and get it done in a way that really advances our country's interests, advances safety and advances our system of air travel.

I want to say, too, that there are other subjects that need to be discussed, including some safety issues, and I am at the moment seeking a date for a safety hearing. I expect to get that date in the next day or so and we'll make that public, but I want to say especially, I can't mention safety without mentioning what I heard on the news last night with respect to the tragic accident in Buffalo, New York.

The accident at Buffalo, New York, was a tragedy, as are all airplane crashes in which there are fatalities, but last evening on the news and this morning reading some briefing material, it occurred to me again that I think there are legitimate questions about experience in the cockpit in certain areas in this country.

I don't want to raise that just for the sake of raising it because I don't want to try to scare anybody or alarm anybody, but when I see a transcript of a co-pilot from an airplane in trouble suggesting that the co-pilot doesn't really understand or know about icing or hasn't flown in icing before, I'm thinking there's something fundamentally wrong on a commercial airplane where, in the co-pilot seat, you have a co-pilot that says the co-pilot has not been in icing before.

I've been in icing, plenty of icing, not that I know much about it, but I must say it reminded me again of the question I've always had about what is the experience in the cockpit with various airplanes. Who's there? How long have they been flying? How much experience do they have? What are they paid?

And then this morning I read that one of the people in the cockpit on that airplane was paid \$16,000, had a second job working in a coffee shop. Prior to the take-off of that particular airplane, this co-pilot flew from Seattle to New York on an overnight flight, stopping in Memphis in order to get to New York to get on an airplane to fly the airplane.

It reminds me of about four or five things that are wrong and I know we have the NTSB doing hearings yesterday and today, but I think it's an important question for all of us to ask.

What do you expect to be in the cockpit of a commercial airplane when you board? What kind of experience? A \$16,000-a-year second officer?

Well, I won't go further, except to say this to you. I think safety is a very important issue. I know all that come before this Committee take it seriously, as well, but I'm going to convene a hearing

on safety very, very soon and we'll discuss some of these issues. I think we owe it to the American people. We owe it to the folks that lose their loved ones in these—in an air crash that has fatalities and so we will begin to work on that.

The range of other issues is lengthy. I mean, it's a wide range of a lot of different issues. We're going to hear from a good many people today. Air traffic control contracts, for example. I'm pleased the new Administration has indicated that they're going to make a commitment to try to fix something that has gone haywire there.

There are just a whole lot of issues and we're going to try to explore all of them.

Let me describe, if I might, the hearing process today. We're not lacking in topics but we are lacking in time somewhat. We don't want to truncate this too much, but we have a larger and longer hearing schedule than is usual for this Committee just because this is the second of these hearings and I want to get on the record a whole lot of interests that have something significant at stake here.

The first panel we'll have testifying will be Chip Barclay, the President of the American Association of Airport Executives. He's joined by Marion Blakey, the President and CEO of Aerospace Industries Association, former head of the FAA; Jim May, President and CEO of the Air Transport Association of America; and Mr. Ed Bolen, President and CEO of the National Business Aviation Association.

I will introduce the second panel when they come up, but let me just say that we have the Air Traffic Controllers, the Airline Pilots, International Association of Machinists and Aerospace Workers, Brotherhood of Teamsters, the Professional Aviation of Safety Specialists, and Flight Attendants. So we have a wide range of interests testifying.

This first panel is a very distinguished panel with a great deal of experience and we are advantaged to be able to hear them today, and let me begin, Mr. Barclay, with you and ask if we will limit testimony to 5 minutes, we would appreciate that, and your entire statement will be made a part of the permanent record.

Mr. Barclay, you may proceed.

**STATEMENT OF CHARLES M. BARCLAY, A.A.E., PRESIDENT,
AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES**

Mr. BARCLAY. Thank you, Chairman Dorgan and Members of the Committee and staff.

It's always a great privilege to appear before the Commerce Committee's Aviation Subcommittee and airport executives look forward to working with the Committee under your leadership.

I'd like to emphasize just a few points from our written testimony. First, a key priority in reauthorization for airport executives is our request to increase the PFC cap from \$4.50 to \$7.50 and index it for construction inflation.

Construction costs have eroded about half of the \$4.50 PFC that was put on in 2000 and at some airports the erosion has been even more dramatic than that. For example, at San Francisco, for a square foot of reconstructed runway in 2000, they were paying \$201. So in 2000 at San Francisco, \$201 for a square foot of run-

way and today that's \$377. A simple runway light in 2000 \$900, today it's \$1,700.

So the request to increase the cap on PFC is really a request to acknowledge the erosion that inflation has taken on \$2,000 when that cap was set.

It's also important to underscore the fact that raising the cap is raising a ceiling on a local decision that's made about specific needs for the PFC. Congress doesn't raise the fees. They have been put in the position of regulating a fixed-dollar cap and as long as that Federal cap exists in law, we would just respectfully recommend that it at least acknowledge the reality of inflation.

Airport executives understand the seriousness of today's financial distress, and they've cut, delayed and eliminated discretionary capital projects and slashed operating budgets, but our members must also balance the need to make those budget cuts with the fact that long-term capacity programs at airports are measured in decades to get them done. So they can't all be shut down if we're going to have the capacity for the system's future when that future arrives.

Second, on AIP grants, they represent the largest portion of smaller airports' capital programs, and we appreciate this Committee's strong support of that program's funding levels. They're critical to having a national network of airports, both large and small.

Third, a provision that was not included in this Committee's bill in the last Congress and one that our members hope won't be included in this year's legislation is a proposal that would legislate a badly-tilted process for FAA's ongoing review of aircraft rescue and fire-fighting standards at airports.

Our members support a fair evaluation of those standards based upon science, fact, and cost-benefit analysis, but they strongly oppose a provision that would tilt that process in favor of an outcome that would be enormously burdensome in costs without measurable safety improvements.

Many members of the Committee, I know, have heard from their home state airports and that's an indication of the seriousness with which our members take this issue. As we point out in our testimony, the staffing increases alone at places like Bismarck and Myrtle Beach are enormous in the relative terms of their modest budgets. Bismarck would go from 7 firefighters to 27 firefighters, Myrtle Beach from 13 to 23.

Overall, our members are estimating that the new costs would be about \$4 billion in capital costs and a billion dollars-a-year in new operating costs and again without a concomitant safety improvement as our members can see it.

I have a letter with me signed by seven major aviation associations on this matter, and I'd like to submit that for the record.

Airport executives are strong supporters of ATC modernization, provisions for small community air service and development, permanent fix for the airport private activity bond issue, and several other issues that are detailed in our testimony.

Mr. Chairman, I'd be happy to answer questions.

[The prepared statement of Mr. Barclay follows:]

PREPARED STATEMENT OF CHARLES M. BARCLAY, A.A.E., PRESIDENT,
AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES

Chairman Dorgan, Ranking Member DeMint and members of the Senate Science, Commerce, and Transportation Subcommittee on Aviation Operations, Safety, and Security, thank you for inviting me to participate in this hearing on the Federal Aviation Administration (FAA) reauthorization bill. I am Charles Barclay, the President of the American Association of Airport Executives (AAAE). AAAE is the world's largest professional organization representing the men and women who manage primary, commercial service, reliever and general aviation airports.

I would like to begin by commending members of this committee for all of the good work that you did on S. 1300, the Aviation Investment and Modernization Act of 2007. The FAA Reauthorization Bill, which this Committee passed in the last Congress, called for expediting the implementation of the Next Generation Air Transportation System (NextGen). It also included a number of provisions that airport executives strongly support.

Airports were particularly pleased that the bill proposed to increase Airport Improvement Program (AIP) funding by \$100 million per year and that it addressed the needs of airports in small communities. Airports were also encouraged that it did not contain a provision that could have forced airports to comply with excessive National Fire Protection Association (NFPA) standards—a proposal that would impact airports of all sizes and could jeopardize service to small communities.

Airports also appreciate this committee's help in extending FAA programs and aviation excise taxes since Vision 100 expired over a year and a half ago. As members of this Committee know, extensions and uncertain funding levels can be very disruptive to airports as they try to plan their construction projects. Airports around the country hope that this Committee will help guide an FAA reauthorization bill through Congress this year that increases funding for airport infrastructure projects, helps airports in small communities and allows for a fair conclusion to the Aircraft Rescue and Fire Fighting rulemaking process.

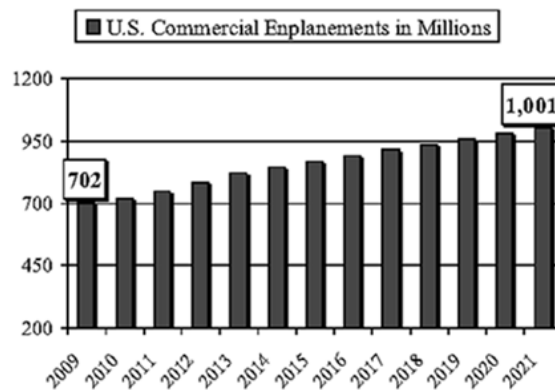
Future Demand, Continuing Delays and Rising Airport Capital Needs

Passenger Levels to Rebound: Much has changed since this Committee introduced S. 1300 almost 2 years ago. Oil prices skyrocketed to nearly \$150 per barrel last year, and the airlines responded by reducing their capacity. Passenger levels declined 1 percent from 2007 to 2008, and the FAA is predicting that enplanements will dip again this year as our economic struggles continue.

However, passenger levels will undoubtedly rebound again as they did after the terrorist attacks in 2001. The FAA is predicting that enplanements will climb from just over 700 million this year to more than 1 billion passengers by 2021—almost a 43 percent increase. Economic conditions may have pushed that threshold back a few years from previous estimates, but airports need additional resources now in order to take advantage of this temporary downturn and prepare for the inevitable higher passenger levels to come.

Projected Passenger Levels

(Source: FAA Aerospace Forecast 2009-2025)

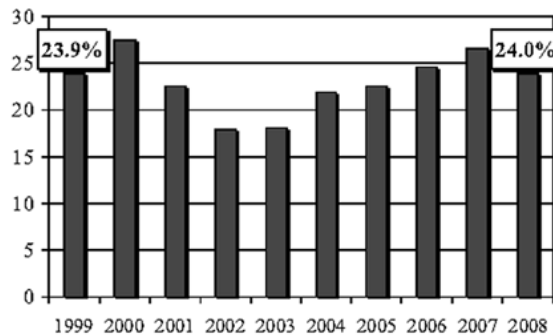


Airline Delays Continue to Frustrate Passengers: On-time arrivals improved slightly in 2008 as the airlines began cutting back service and reducing aircraft from their

fleets. However, airline delays continue to plague the aviation industry. According to the Bureau of Transportation Statistics, 24 percent of all flights were delayed, diverted or canceled last year. That's higher than the percentage of flights that were delayed, diverted or canceled in 1999 and in each year between 2001 and 2005.

Flights Delayed, Cancelled or Diverted

(January to December/Source: BTS)



Not surprisingly, airline passengers continue to express their frustrations with flight delays. According to the Department of Transportation's Air Travel Consumer Report, airline delays topped the list of passenger grievances again in 2008. The report indicates that airline passengers filed almost 11,000 complaints last year. Approximately 31 percent of those were related to flight delays, cancellations and misconnections. By contrast, complaints about fares accounted for less than 3.7 percent.

Airline delays are also having an adverse impact on our economy. Last year at this time, the Joint Economic Committee released a report on financial impact of airline delays. The report indicated that flight delays in 2007 cost the economy approximately \$41 billion. Of that amount, airlines were hit with \$19 billion in delay-related costs and passengers another \$12 billion. The report also described how delays harm the environment by pointing out that delays resulted in the use of 740 million gallons of jet fuel and the release of more than 7 million metric tons of carbon dioxide.

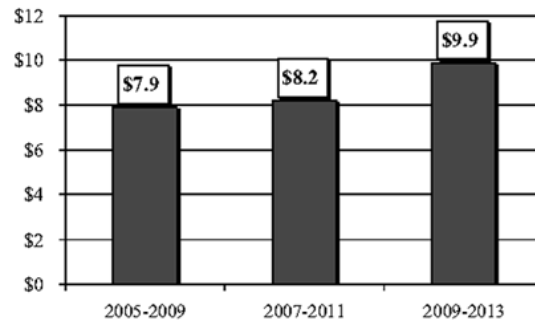
We should expect that flight delays, cancellations, diverted flights and passenger complaints will rise when the economy improves and more passengers and aircraft return to the system. The FAA's Aerospace Forecast for 2009 to 2025 indicates that "inadequate" infrastructure could "result in even more congestion and delays" in the future. Delay-related problems will continue to be exacerbated unless airports have the resources they need to increase capacity.

Rising Airport Capital Needs: Airport capital needs are continuing to rise as airports prepare for increasing passenger levels and work to reduce airline delays by increasing capacity. Late last year, the FAA released its National Plan of Integrated Airport Systems (NPIAS) for 2009 to 2013. The report indicates that there will be \$49.7 billion of AIP-eligible projects during the next 5 years—or an average of \$9.9 billion per year. This is approximately 21 percent higher than the \$41.2 billion that FAA estimated for AIP-eligible construction projects for 2007 to 2011.

The NPIAS identifies 3,356 existing and 55 newly proposed public-use airports that are eligible to receive AIP grants. According to the report, 27 percent of the planned development is to bring airports up to current design standards and 17 percent is for capacity-related projects. Another 17 percent of the planned development is for replacing or rehabilitating airport facilities such as pavement and lighting systems.

Average Annual AIP-Eligible Projects

(Source: FAA NPIAS 2009-2013)
(Dollars in Billions)



Airports rely on a number of sources for airport capital development projects. The overwhelming majority of funds come from airport bonds, AIP and Passenger Facility Charges (PFCs). However, the FAA acknowledges that “the NPIAS only includes planned development that is eligible to receive Federal grants under the AIP. It does not include necessary but ineligible airport development, such as automobile parking structures, hangars, air cargo building, or the revenue-producing portion of large passenger terminal buildings.” So, the chart above only represents a portion of airport’s total capital needs.

The FAA suggests that high fuel prices last year and current economic conditions may affect its estimates for AIP-eligible projects. *However, the agency correctly points out that “the large scale, long-term programs (i.e., a new runway or a significant runway extension) involving a sequence of planning, environmental analysis, approval, financing, and construction, typically over a 10- to 15-year period, are not particularly sensitive to short-term fluctuations in traffic.”*

In November, Washington Dulles, Chicago O’Hare and Seattle-Tacoma International Airports opened new runways. According to the Department of Transportation (DOT), the three new runways will accommodate an additional 330,000 take-offs and landings per year. However, each of those critical projects took years to complete. For example, the Port of Seattle began planning to increase capacity at its airport in 1989—approximately 20 years ago.

In 2007, the FAA also issued a report entitled, “Capacity Needs in the National Airspace System.” The report examined which of the busiest 35 airports in the FAA’s Operational Evolution Plan will be able to meet future demand. It indicates that “18 airports around the country are identified as needing additional capacity by 2015, and 27 by 2025, if the airport system remains the same as it is today without the planned improvements.”

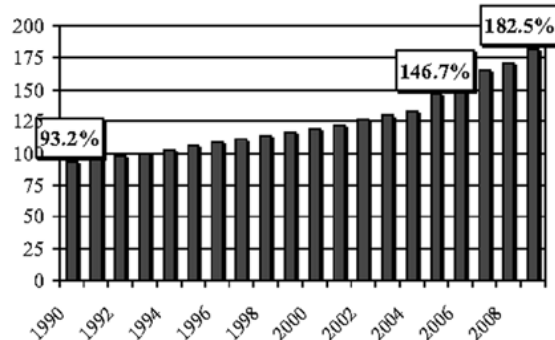
Even if planned improvements occur, the report identifies 6 airports that will need additional capacity by 2015 and 14 airports that will need additional capacity by 2025. Considering the long time it takes to complete capacity-enhancing projects it is critical that airports be able to prepare now for the increasing passenger levels to come.

Airports Squeezed by High Construction Costs: Airport efforts to prepare for higher passenger levels and increasing aircraft operations have been hampered by construction costs, which skyrocketed in recent years. According to the Means Construction Cost Indexes, the average construction costs for 30 major U.S. cities have jumped more than 24 percent since 2005 and almost 11 percent just since Congress began considering the FAA reauthorization bill in early 2007.

Some airports have experienced even higher increases than the national average. For example, the cost of runway reconstruction at the San Francisco International Airport has increased from \$201 to \$377 per square foot since 2000—an 87 percent increase. Taxiway reconstruction has increased from \$161 to \$304 per square foot during the same timeframe—an 89 percent increase. Even the cost of a simple runway light at the airport has increased from \$900 to \$1,700.

Rising Construction Costs

(Source: Means Construction Cost Indexes/Jan. 2009)
(Baseline: Jan. 1, 1993)



Airports Need Additional Resources to Accommodate Future Demand, Reduce Delays and Offset Construction Cost Inflation

Congress, the Administration and aviation stakeholders should all be able to agree on the need to improve efficiencies and help reduce delays by implementing NextGen. Airports strongly support those efforts, and the Port Authority of New York and New Jersey is doing its part by heading the National Alliance to Advance NextGen. The group, which is pushing for the overhaul of our air traffic control system, includes 254 organizations including AAAE.

As I mentioned previously, the passenger level is expected to increase from an estimated 702 million in 2009 to more than 1 billion in the next 12 years. That is the equivalent of adding the entire population of the U.S. to our aviation system. While many are understandably focusing on the need to implement a satellite-based navigation system to reduce congestion in the skies, we should not lose sight of the need to increase capacity and reduce congestion on the ground.

According to the FAA, “new runways and runway extensions provide the most significant capacity increases.” In an effort to rebuild the infrastructure necessary to accommodate higher passenger levels in the longer term, to help reduce delays and to offset the impacts of construction costs, airport executives are urging Congress to raise the federally-imposed PFC cap, index the cap for construction cost inflation, increase AIP funding and permanently eliminate the Alternative Minimum Tax (AMT) penalty on airport private activity bonds.

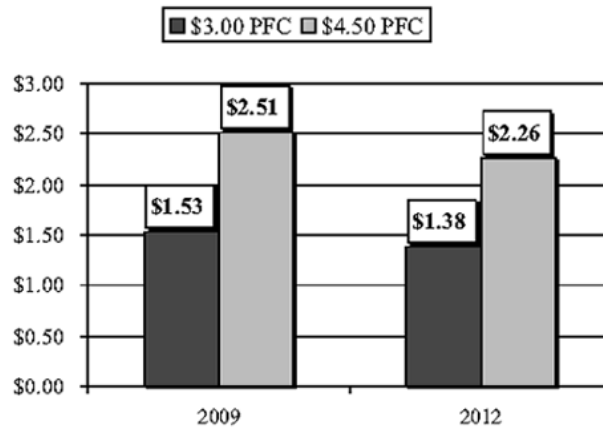
Raise the PFC Cap: The PFC program has helped airports increase safety, security and capacity and mitigate aircraft noise for almost 20 years. The Aviation Safety and Capacity and Expansion Act of 1990 included a provision that allowed airports to collect a local fee of up to \$3 on passengers boarding aircraft at their facilities. AIR-21, which Congress passed in 2000, raised the cap to \$4.50. Money generated from PFCs augments AIP funding and other sources or revenue that airports use for a variety of purposes including building new runways, taxiways and terminals.

H.R. 915, the FAA Reauthorization Act of 2009, which the House Transportation and Infrastructure Committee approved earlier this year, proposes to raise the PFC cap to \$7. That provision represents an enormous step in the right direction, but airports are encouraging Congress to raise the cap slightly higher to \$7.50 and to index the cap for construction cost inflation.

Airports collected about \$2.7 billion from PFCs in calendar year 2008—down from more than \$2.8 billion the previous year. Airports are being hit on two fronts because overall PFC revenue is declining while the value of PFCs has eroded due to construction cost inflation. Since Congress raised the PFC cap to \$4.50 in 2000, construction costs have risen by more than 53 percent.

Due to construction cost inflation, a \$3 PFC is worth approximately \$1.53 today, and \$4.50 PFC is worth about \$2.51. Unless corrective action is taken, the value of PFCs will erode even more by 2012 when a \$3 PFC is expected to be worth only \$1.38 and a \$4.50 PFC is expected to be worth only \$2.26.

Erosion of PFC Value Due to Construction Cost Inflation



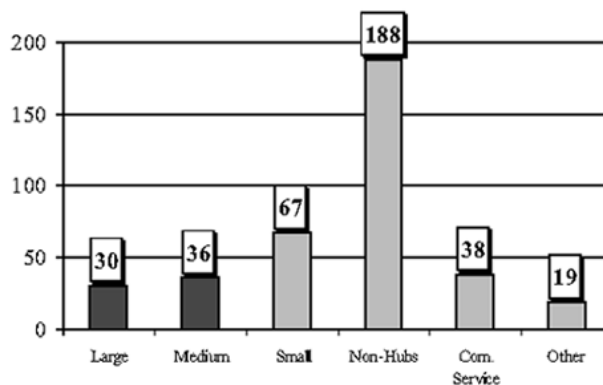
Some may suggest that raising the PFC cap by \$3 is too much. But raising the PFC cap to \$7.50 would not quite be enough to offset the impact of inflation in 2008. To accurately reflect construction cost inflation in 2009, the PFC cap would need to be raised to more than \$8.

According to the FAA, if all those airports collecting \$4 and \$4.50 PFCs today began collecting \$7 PFCs, raising the cap would generate approximately \$1.3 billion per year. Raising the cap to \$7.50 could generate slightly more funds for critical safety, security and delay-reducing capacity projects at airports around the country including 97 of the top 100 airports.

Overall, 66 large and medium hub airports collect PFCs. However, large airports are not the only beneficiaries of the PFC program. Small airports also rely on PFC revenue to augment AIP funding they receive. According to the FAA, more than 300 small hub and smaller airports have been approved to collect PFCs, and 252 small airports collect PFCs at the maximum \$4.50 level.

Airports Approved to Collect PFCs By Hub Size

(Source: FAA)



Even small airports that don't collect PFCs benefit from the program. That's because large and medium hub airports that collect PFCs have a portion of their AIP entitlements withheld. Specifically, large and medium hubs that collect \$4.50 PFCs

have 75 percent of their entitlements withheld. Current law requires 87.5 percent of those withheld funds be redistributed to small airports through the Small Airport Fund. Small airports received almost a half-billion dollars from the fund in FY07.

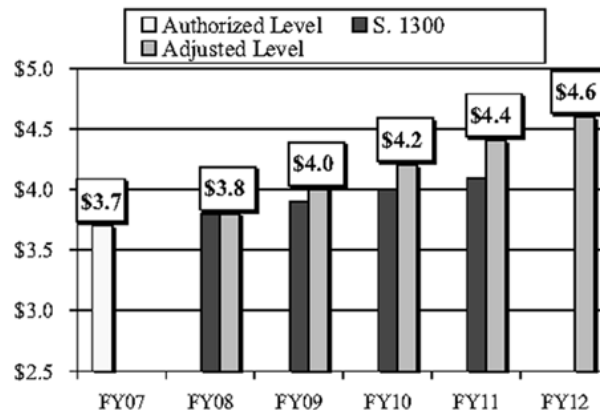
Raising the PFC cap would also help stimulate the economy by creating much-needed jobs. According to DOT, every \$1 billion invested in transportation infrastructure creates approximately 35,000 jobs. Raising the PFC cap to \$7.50 and indexing it for construction cost inflation would help stimulate the economy by creating tens of thousands of good-paying jobs every year.

Increase AIP Funding: In addition to raising the PFC cap, airport executives are continuing to urge Congress to increase AIP funding. AIP is an important source of funding for all sizes of airports and especially smaller airports around the country. Large and medium hub airports also depend on AIP funding—particularly money distributed through the Letter of Intent Program (both entitlement and discretionary funds) to help pay for large capacity projects.

Airport executives are grateful that this subcommittee recommended increasing funding for airport construction projects by \$100 million per year as part of S. 1300. We hope that you will increase AIP funding by at least that amount in the FAA reauthorization bill that you introduce this year and would encourage you to consider increasing funding so that the program keeps up with increased construction costs. Doing so would translate into \$4.2 billion for AIP in FY10, \$4.4 billion in FY11 and \$4.6 billion in FY12.

Adjusting AIP for Construction Cost Inflation

(Dollars in Billions)



Impact of Economic Stimulus Package: Some may suggest that it isn't necessary to raise the PFC cap or increase AIP funding because airports will receive an additional \$1.1 billion in AIP funds as part of the economic stimulus package that Congress passed earlier this year. Airports are grateful for the additional infrastructure funds. However, the additional revenue will essentially offset a shortfall in the amount of money that Congress appropriated for AIP in recent years.

As members of this Subcommittee know, Vision 100 proposed increasing AIP funding by \$100 million per year and authorized \$3.6 billion for AIP in FY06 and \$3.7 billion in FY07. S. 1300, the FAA Reauthorization Bill that this panel approved in 2007, called for continuing that upward trend by authorizing \$3.8 billion for AIP in FY08 and \$3.9 billion in the following year.

Despite the authorizing committee's support for increasing AIP funding by \$100 million per year, Congress has appropriated approximately \$3.5 billion for AIP every year during the past 4 years. This means that airports received approximately \$1 billion less in AIP funds from FY06 through FY09 than this subcommittee approved. The additional AIP funding in the stimulus will help create jobs and make up the difference between the authorized and appropriated levels for AIP in recent years. However, the stimulus funding does not offset the need to raise the PFC cap or increase AIP funding.

Permanent Fix for Airport Private Activity Bonds: AAAE has long argued that Federal tax law unfairly classified the vast majority of bonds that airports use as

private activity even though they are used to finance runways, taxiways and other facilities that benefit the public. Since private activity bonds are subject to the AMT, airport bond issuers traditionally have been charged higher interest rates on their borrowing.

The economic stimulus package eliminated the AMT penalty on private activity bonds that airports and other entities issue in the next 2 years. The bill also allows airports and others to current refund bonds issued in the past 5 years that are callable in 2009 and 2010. The AMT provisions are helping airports create jobs by moving forward with critical infrastructure projects that had been delayed because of the financial crisis and the collapse of the bond market.

The provisions in the stimulus package allowed the Metropolitan Washington Airports Authority to sell \$400 million in airport revenue bonds in March. Other airports have also sold bonds including the Miami International Airport, which sold \$600 million in airport revenue bonds just last week. Miami airport officials expect that eliminating the AMT penalty will save the airport between \$9 million and \$14 million per year. That's money that the airport could use to invest in other airport infrastructure projects and create even more jobs.

Airports around the country owe Senate Majority Leader Harry Reid and Senator John Ensign a debt of gratitude for their leadership on this issue. I urge members of this panel to work with their colleagues on the Finance Committee to implement a permanent fix so airport private activity bonds are not subject to the AMT penalty.

Preserve Commercial Air Service To Small Communities: Fairly Conclude ARFF Rulemaking Process

Safety is by far the most important priority for airports around the country, and airport operators devote a great deal of time, effort and resources to continue to improve safety at their facilities. As part of that commitment to safety, airports work closely with the FAA and follow strict aircraft rescue and fire fighting requirements. Fire fighters are an integral component of a team of professionals dedicated to ensuring aviation safety, and all of us owe them a debt of gratitude for their service.

Despite our strong relationship with fire fighters and our tremendous respect for their mission, we strongly oppose a provision in H.R. 915 that could force airports to comply with National Fire Protection Association (NFPA) standards. At first glance, this may seem like a reasonable approach to improve aviation safety. Upon closer review, however, it is clear that the plan would have a huge financial impact on airports of all sizes without demonstrating a clear safety benefit. It could also cause some small communities to lose commercial air service.

To comply with NFPA standards airports would be required to dramatically increase the number of fire fighters at their facilities without any evidence that additional personnel are actually necessary. Airports would have no choice but to pass those additional operating costs on to the airlines at a time when large and small airports are trying to keep their costs low. Increased operating costs would be particularly devastating to small airports struggling to maintain and attract new commercial air service. In fact, many small airports fear that increased operating costs would cause them to completely lose commercial air service.

The proposed NFPA standards would also increase airport infrastructure and equipment costs with little benefit in terms of enhanced safety. These requirements would force airports to divert scarce AIP funds away from necessary safety, security and capacity projects. This subcommittee previously proposed to fund AIP at between \$3.8 billion and \$4.1 billion per year. It could take as much as a full year's worth of AIP funding to pay for the additional infrastructure and equipment necessary to comply with NFPA standards.

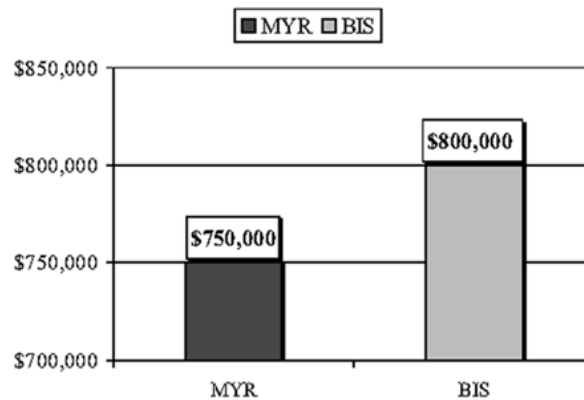
AAAE has been compiling information from airports around the country about the cost to comply with NFPA standards. Based on feedback the association has received from approximately 50 large, medium, small and non-hub airports, AAAE expects that the increased operating requirements could cost airports as much as \$1 billion per year and \$4 billion in increased infrastructure and equipment costs.

Again, these additional requirements would be particularly hard on small airports. For example, the Bismarck Municipal Airport would need to increase its roster of fire fighters from 7 to 27. The additional operating expenses would cost the airport almost \$800,000 per year—more than triple its current costs. The airport would also need to build a new ARFF station and purchase two new fire fighting vehicles costing a total of \$6 million.

The Myrtle Beach International Airport estimates that the NFPA standards would force the South Carolina airport to double the number of fire fighters from 13 to 23—costing the airport approximately \$750,000 per year. Airport officials also

anticipate that they would “incur increased infrastructure costs and equipment costs with little benefit in terms of enhanced safety.”

Additional Annual Operating Costs to Implement NFPA Standards



The NFPA standards would have a huge financial impact on large airports, too. As Ranking Member Hutchison knows, Dallas-Fort Worth International Airport has seven runways and covers approximately 30 square miles. It would cost the airport between \$68.8 million and \$83.8 million to construct new ARFF facilities and purchase new fire fighting vehicles to comply with NFPA standards. The annual operations costs would add on another \$25.6 million to \$28.4 million every year.

There is already an FAA-led process in place to review and update current fire fighting standards at airports. Rather than adopting a one-sided proposal that would tilt the playing field toward one particular stakeholder in that process, Congress should allow the FAA to continue to work with all aviation stakeholders toward bringing the existing rulemaking process to a fair conclusion instead.

AIP and PFC Modifications

Maintain Higher Federal Match for Small Airports: Vision 100 included a helpful provision that increased the Federal share for small hub and smaller airports from 90 percent to 95 percent through FY07. Airport executives around the country appreciate that this subcommittee proposed to maintain that higher Federal match in S. 1300. In these challenging economic times, small communities around the country are finding it very difficult to come up with a 5 percent local matching share. Increasing the amount to 10 percent could prevent certain small airports from moving forward with planned construction projects. We hope you will retain that provision in the next FAA bill.

Minimum Entitlements and Annual Apportionments: We also recommend that you include a provision in the bill that would allow airports to continue to receive the minimum entitlements even if their enplanements dipped below 10,000 in 2008 as a result of service cuts related to high fuel costs and/or the downturn in the economy. We are similarly proposing that entitlements for airports with more than 10,000 enplanements not be reduced if their passenger levels declined in 2008.

Commercial service airports rely on revenue generated from airlines, other airport tenants and passengers to meet their operational and infrastructure requirements. Decreasing numbers of flights and passengers translate into fewer dollars for airports to use for operational purposes or to invest in infrastructure projects that help stimulate the economy by creating jobs. Allowing airports to continue to maintain their minimum entitlements and annual apportionments would ensure that airports are not unnecessarily penalized even more.

Land Acquired for Noise Compatibility Purposes: Airports appreciate the fact that S. 1300 included a provision that would have made a grant assurance change regarding the sale of land that an airport initially acquired for a noise compatibility purpose but not longer needs. Current law requires that the proceeds proportional

to the Federal Government's share of the land acquisition be returned to the aviation trust fund.

The Senate version of the reauthorization bill would have allowed DOT to reinvest the government's share of the proceeds in another project at that airport or another airport. However, when an airport leases land that it initially acquired for a noise compatibility purpose, the FAA considers that to be a disposal and requires the airport to return the Federal funds it received to purchase the land.

Airports would like to be able to retain control of the land they acquired for noise compatibility purposes through leasing so they are not forced to sell land that they may need at a later date when that same parcel of land may be selling at a higher price (and at a greater cost to the Federal Government and the airport) or may not be available to purchase at all. We would like to continue to work with this subcommittee to achieve that goal.

Streamline PFC Process: Airports supported the previous Administration's proposal to streamline the PFC application and approval process. The FAA pointed out that "current law requires an application and approval of each PFC project (or amendment to a project) that sometimes involves prolonged reviews and delays." We agree with the FAA's assessment and strongly support streamlining the PFC process, which currently takes several months to complete.

Airports work closely with our airline partners to reach consensus on PFC-funded projects and will continue to do so if Congress endorses PFC streamlining. For instance, airports would continue to provide a reasonable notice and comment period for carriers operating at their facilities. However, airports should be allowed to impose a new PFC earlier in the process, avoid months in unnecessary delays, and create jobs more quickly. Should a carrier file an objection, DOT would have the authority to terminate the airport's authority to collect PFCs for the new project if the agency concurred with the objection.

Small Community Issues

Increase Funding for Small Community Air Service Development Program: AAAE has been a long-time proponent of the Small Community Air Service Development Program. Since Congress created the Small Community Program in 2000, it has helped numerous small communities around the country suffering from insufficient air service or unreasonably high fares. Airports are grateful that S. 1300 included \$35 million per year for this critical program.

Considering the number of communities that apply for funds from this program and the increasing pressures on small communities, we urge this subcommittee to consider making a greater investment in this critical program. Specifically, we urge you to authorize \$50 million for the program per year and allow communities to receive follow-on grants for the same project. We also recommend that small airports be allowed to reduce their operating costs by using small community grants for ground handling services.

Mr. Chairman, we would also like to bring to your attention an issue related to the Small Community Program. Last year, DOT received 66 proposals from communities in 32 states requesting more than \$36 million "to support new and ongoing air service development projects." However, the demand for Federal assistance far exceeded the approximately \$10 million that Congress approved for the program in the FY08.

In September, DOT announced that it had awarded grants that will benefit 16 communities in 12 states. Those communities will receive between \$100,000 and \$750,000 in grants and are contributing their own resources to their respective projects. However, airport executives were shocked to learn that of the \$10 million that Congress appropriated for this program, only \$6.85 million is actually slated to go to small communities that need assistance. According to DOT's order, the other \$3.15 million will be used to cover "current and future administrative support costs."

Designating 32 percent of funds appropriated for the Small Community Program for administrative purposes seems unreasonably high to us. By contrast, the FAA withheld \$75 million in Fiscal Year 2007 to distribute more than 2,000 AIP grants—or approximately 2 percent of the \$3.5 billion that Congress appropriated for the AIP program that year.

Many airport executives question why DOT needs \$3.2 million to administer only 16 Small Community Program grants. Some or all of those funds could be distributed to other small communities struggling to retain or attract new commercial air service instead. Based on the average grant award, \$3.2 million could be used to fund another seven projects.

We encourage you and your colleagues on the Aviation Subcommittee to examine DOT's decision to allocate such a large portion of small community funds for admin-

istrative purposes. Airports would strongly prefer that DOT designate some or all of the \$3.2 million to other small communities that have applied for grants instead.

Maintain Essential Air Service Program: Last year was a challenging year for many EAS communities. Due, in part, to rapidly increasing fuel prices and air service cuts, 37 eligible EAS communities temporarily lost service last year. When all the service disruptions were added up, EAS communities were without air service for more than 200 months. Seven EAS communities still do not have air service.

Airport executives are pleased that this subcommittee rejected the previous Administration's proposal to drastically cut funding for the EAS program to \$50 million per year. Small airports around the country were encouraged that this panel agreed to provide a total of \$175 million per year for the program instead. We encourage Congress to maintain adequate funding for EAS and continue to take steps to improve this critical program.

Invest in FAA's Contract Tower Program: Another program that has improved air traffic control efficiency and safety at airports in small communities is the FAA's Contract Tower Program. This program has been in place since 1982 and currently provides for the efficient and cost-effective operation of air traffic control towers at 242 smaller airports in 46 states. Without the Contract Tower Program many simply would not have any air traffic control services at their facilities.

AIR-21 included a provision that created the Contract Tower Cost Share Program, which currently allows 16 airports in 12 states that fall slightly below the eligibility criteria to participate in the program if they provide local funds. We recommend that this subcommittee authorize \$9.5 million for the Contract Tower Cost Share Program in FY10 and increase the amount by \$500,000 per year. Doing so would keep the existing towers operating and allow additional non-towered airports to participate in the program.

Other Recommendations

Expand VALE Program: As a result of a provision contained in Vision 100, the FAA established the Voluntary Airport Low Emissions program to assist airports with implementing air quality emission reduction programs. Only those airports that are in nonattainment and maintenance areas for certain pollutants are eligible to participate in this program.

Given the importance of air quality to communities we believe that this program should be opened up to all airports, regardless of their air quality designation. As a recent Governmental Accountability Office report noted, airports are just beginning to take advantage of this program, and opening it to more airports would enhance its success and reduce emissions.

Phase Out Stage Two Aircraft: S. 1300 included a welcome provision calling for the phase out of Stage 2 aircraft with a maximum weight of 75,000 pounds by December 31, 2012. We encourage you to maintain the provision in next version of the FAA reauthorization bill.

Conclusion

Chairman Dorgan, Ranking Member DeMint and members of Aviation, thank you again for inviting me to appear before the Subcommittee on Aviation Operations, Safety, and Security, to discuss the FAA reauthorization bill. As I mentioned at the beginning of my statement, airports are grateful to this subcommittee for including a number of key airport provisions S. 1300 in the last Congress. We look forward to continuing to work with as you reconsider the FAA reauthorization bill again this year.

Senator DORGAN. Mr. Barclay, thank you very much.

We are joined by the Ranking Member of this Subcommittee and Ranking Member of the full Committee. I started with Mr. Barclay. We have not done opening statements. We started with the witnesses, but does the Ranking Member of the Subcommittee wish to comment at this moment?

STATEMENT OF HON. JIM DeMINT, U.S. SENATOR FROM SOUTH CAROLINA

Senator DeMINT. I thank the Chairman. I'll reserve most of my comments and ask if I can submit my whole statement for the record.

But I was just reminded, I met with a few families who had lost family members in the crash going into Buffalo in February, and we met with the nominee, Mr. Babbitt, of the FAA, and he was gracious enough not only to meet with me but to meet with the families and we were reminded, which I know I don't need to remind anyone on this panel or here today, that everything we're doing is to serve those people who ride in the planes, the Americans who want a more efficient, safe air travel system in our country.

It's not really to serve political goals or bureaucracy here, and a very somber meeting with folks who lost loved ones and then for them to begin to see, as the facts emerged, that maybe we didn't do everything we can to keep that from happening. I think as we go through this process of modernizing, there's a lot of work to do.

Hopefully it will be bipartisan, not to serve our goals, but to serve those folks who trust us every day for their safety.

I look forward to the testimony and I'll just reserve my questions for later.

Thank you.

Senator DORGAN. As a courtesy to the Ranking Member of the full Committee, do you wish to have a comment, and if so, then I'll call on the other two, as well, for very brief comments and then we'll go back to the panel?

**OPENING STATEMENT OF HON. KAY BAILEY HUTCHISON,
U.S. SENATOR FROM TEXAS**

Senator HUTCHISON. Thank you, Mr. Chairman. I, too, will be brief, but I do appreciate your having this hearing.

It is very important. I was the Chairman and also Ranking Member of the Aviation Subcommittee before I became Ranking on the full Committee and when I was Ranking just last session, Senator Rockefeller and I came to an agreement on the FAA Reauthorization Bill. It was a very good proposal. We had hashed out all the issues and were ready to go forward, but we were not able to get the consensus with the House.

Now we have another year and another Congress and I hope that we can have a bipartisan bill that really focuses on the two major issues and that is safety, which is Number 1, and NextGen, which is going to be a factor for not only increasing our air space but also hopefully increasing the stability and safety of our air space.

I hope that we will look to confine the FAA Reauthorization Bill to those key issues and not get bogged down in other controversial but not essential issues. That would be my hope for this Subcommittee as well as the full Committee when we do go to a mark-up.

It is essential that we go forward and have an FAA Administrator who sets the policy for NextGen, who determines what we can do for the investment that will be made because some of the organizations represented at this table will be asked to basically pay for the improvement in our air traffic control capabilities.

So we need to be clear in that focus and then we must address the issues of safety and how we can ensure that our system is the very best in the land.

So with that, Mr. Chairman, I thank you and certainly Senator Rockefeller and I will be very much a part of the mark-up and the overall addressing of the authorization of the FAA going forward. [The prepared statement of Senator Hutchison follows:]

PREPARED STATEMENT OF HON. KAY BAILEY HUTCHISON, U.S. SENATOR FROM TEXAS

Thank you, Mr. Chairman, for holding today's hearing. It is my understanding that our staffs have been working together and we may have a draft reauthorization proposal sometime after the Memorial Day recess.

We have a tremendous opportunity over the next few months to make great strides toward modernizing our air traffic control system and putting the FAA on the right path, and I look forward to working with you on that goal.

We have an opportunity to directly impact and accelerate the FAA's air traffic control modernization efforts. While the FAA has been moving in the right direction, Congress needs to provide further clarification on what we expect in the short-term.

While sound long-term planning is still an important cog in the overall process, it is time for the FAA to effectively and efficiently start implementing NextGen. We need to start seeing the development of programs and projects that provide specific benefits and efficiencies to the users of the system. We cannot expect stakeholders to support NextGen and the investment necessary if the FAA cannot demonstrate the benefits of modernization.

Our air traffic facilities need to be upgraded. While airspace projects are sometimes more difficult to understand and less tangible than highway or rail projects, they are no less important and deserve a significant amount of attention.

As this Committee knows, Chairman Rockefeller and I worked together on an amendment to the stimulus bill that would have accelerated NextGen developments and procedures across the country. That amendment ultimately was not accepted into the final package, but it was a move in the right direction and a signal that we are serious about improving this system.

However, in order to pass an FAA Reauthorization Bill this year, we are going to need a lot of cooperation and understanding from the aviation community, the Administration, and Congress. As exhibited by the process last year, this bill cannot carry or be the vehicle for controversial provisions.

Passing an FAA bill should be a priority for this Congress. This is a fragile process and Congress should focus on safety improvements and NextGen acceleration and not get bogged down with issues that could ultimately lead to the challenges we faced last Congress.

Thank you, I look forward to the testimony.

Senator DORGAN. Thank you very much. Senator Warner, do you wish to have a minute?

Senator WARNER. No, Mr. Chairman. I just, I am looking forward to learning. As somebody who was a former Governor and often-times got frustrated with the lack of progress on these issues, I'm anxious to learn why there has not been that progress and hopefully can contribute to a solution.

Senator DORGAN. Senator Johanns?

**STATEMENT OF HON. MIKE JOHANNNS,
U.S. SENATOR FROM NEBRASKA**

Senator JOHANNNS. Just very, very briefly. I hadn't planned on saying anything, but, Mr. Chairman, your thoughts on a hearing on safety, I want to endorse.

The family members from the Buffalo crash did come in to see me, too, and, first of all, it's enormously sad, but, second, when you read the transcript from those last minutes, it's appalling.

I hope we dig deep there. I hope we get a good understanding of what training is happening, what is not happening, the condition of equipment, and the safety record of that equipment. I just think

there are a lot of questions and I think we owe it to these families and other families who have been so profoundly impacted.

So I was going to try to pull you aside and say is there something we can do here and so I really appreciate your comments about having a safety hearing. I want to endorse that and support that.

Senator DORGAN. Senator Cantwell, we're doing one-minute openings. We started with the panel, but we'd be happy to recognize you for a minute.

Senator CANTWELL. One minute?

Senator DORGAN. We weren't actually going to do any opening statement because we have 10 witnesses, but because of circumstances, we decided to offer some opening statements. You're welcome to make some.

**STATEMENT OF HON. MARIA CANTWELL,
U.S. SENATOR FROM WASHINGTON**

Senator CANTWELL. Well, thank you, Mr. Chairman. You know, I will. Thank you very much.

I hopefully will have a chance to ask the witnesses today about the NextGen implementation and focus particularly on required navigation performance, RNP.

To have very high precision navigation on determined paths really does help us in many ways, including on greenhouse gas emissions. And some of this technology is being tested now currently at SeaTac Airport with Alaska Airlines and so I want to get your thoughts on that.

And obviously want to, Mr. May and Ms. Blakey, talk to you about the need for the Federal Government to continue to support efforts in aviation biofuels, something that I hope the FAA can pass the FAA airworthiness standards and I think that's very important in its development and I think we still probably have some gaps and it's very important that we fill those gaps.

Last, just on UAVs, I think that this is important technology. Two years ago, Mr. Chairman, we tried to get an—well, we did have an amendment, we didn't have the bill pass, but obviously in accelerating the use of UAVs and I know that's a challenge for FAA but something—the technology is so vital to improving so many different aspects of whether it's dealing with our security efforts on Coast Guard or Border Security or fighting forest fires and having information. We need better coordination and we need the FAA to move on that.

So anyway, thank you, Mr. Chairman.

Senator DORGAN. Thank you very much.

Next, we'll hear from Marion Blakey, the President and Chief Executive Officer of Aerospace Industries Association.

Ms. Blakey, you may proceed.

**STATEMENT OF HON. MARION C. BLAKEY, PRESIDENT AND
CEO, AEROSPACE INDUSTRIES ASSOCIATION**

Ms. BLAKEY. Good afternoon, Chairman Dorgan. Let's see if I can—is that better?

Chairman Dorgan, Ranking Member DeMint, Ranking Member Hutchison, and all of the distinguished members of this panel, I

want to say how very pleased I am to be here and have an opportunity to testify before you once again.

I now represent the Aerospace Industries Association and our almost 300 member companies. In this economy, I think it's important to point out that our industry is responsible for more than two million well-paying jobs, \$95 billion in exports last year, leading to a positive foreign trade balance of \$57 billion. It's the largest of any U.S. manufacturing sector.

As you know, the civil aviation sector is going through a very difficult time. Commercial carriers continue to take capacity out of the system due to the decreased demand. At the same time, consequently, our commercial aircraft manufacturing sector had backlogs that were once stretching out for years. At this point they are shrinking.

Manufacturers of general aviation aircraft have been particularly hard hit in this economy because of the negative effects of public anger at the behavior of executives in another industry, and the subsequent rhetoric that was hurled at the business jet community.

Airlines will eventually recover with a strong return of demand and public confidence and economic progress will get the general aviation plants back humming, as well, but the sustained growth of commercial and general aviation does not simply depend on a return to national economic prosperity.

What's needed is a national aerospace system that will accommodate new demand, economic growth and, critically importantly, enhanced safety. I like the emphasis in this hearing today on safety, it always has to be first and foremost, and I compliment you on beginning there.

As you all know, the new system I'm referring to is NextGen. Nothing is more important to the future of global air travel than building and implementing the NextGeneration Air Transportation System.

We have a unique opportunity to take advantage of our economic situation. We should use FAA Reauthorization and this Administration's commitment to recapitalize our Nation's transportation infrastructure as an opportunity to accelerate NextGen and help the users of the new system take full advantage of its benefits.

This Administration is right to invest Recovery Act funds into infrastructure, but we missed an excellent opportunity to use some of that money to improve aviation infrastructure with shovel-ready improvements to our 50-year-old air traffic system, as well.

President Obama has done a masterful job of selecting the right officials to move this forward. Secretary LaHood has hit the ground running and let this industry know that the Administration is committed to NextGen.

We look forward to continued support from Secretary LaHood and from Randy Babbitt, the FAA Administrator-nominee.

There are a number of significant challenges ahead. NextGen is comprised of three broad components: ground technology infrastructure, air traffic procedures, and aircraft equipment, all of which must be delivered together to ensure maximum benefits.

ADS-B is a success story so far, Automatic Dependent Surveillance Broadcast is the backbone of the system, but we've got to re-

double our efforts on data communications and SWIM, Systemwide Information Management.

Second. We've got to ensure that we build and use performance-based navigation procedures. Yes, RNP, Senator Cantwell, you're quite right. And we need to have them at every airport that's currently capable of accommodating instrument flight rules traffic.

And finally, there's that long pole in the tent and by this, I mean equipping aircraft to use the system.

For these three critical factors to move implementation forward, we need to establish solid funding through the FAA's reauthorization and an increase in the annual General Fund contribution.

Now, I want to mention just one other thing before closing and that is the House language in the Reauthorization Bill on repair stations.

Industry is committed to safety and security at repair stations around the world as a global industry we should be. We depend on an international network of safe, secure stations to repair and maintain aircraft, but we believe that the proposed language, as currently constituted, could actually undermine the safety systems we're constantly improving while damaging leadership around the world for the United States and violating longstanding safety agreements. I hope the Committee will take a close look at this.

Thank you. I look forward to your questions.

[The prepared statement of Ms. Blakey follows:]

PREPARED STATEMENT OF HON. MARION C. BLAKEY, PRESIDENT AND CEO,
AEROSPACE INDUSTRIES ASSOCIATION

Chairman Dorgan, Senator DeMint, Members of the Committee—good morning. It is a pleasure and an honor to testify before this Committee once again. I represent the Aerospace Industries Association (AIA)—we are an association of nearly 300 aerospace manufacturing companies and the 657,000 highly skilled employees who make the aircraft that fly in our airspace every day as well as the avionics and air navigation equipment that allow them to do that safely. I'm especially happy to come before you to talk about the FAA Reauthorization, including the modernization of the air transportation system, and the safe use of foreign repair stations.

You know, it's been said that in this town where you stand on an issue depends on where you sit. Well, when it comes to NextGen, I may have changed seats, but my views on NextGen haven't changed. Our National Airspace System (NAS) needs NextGen as much today as it did when I was at the Federal Aviation Administration (FAA). In fact, we need it even more. Because NextGen isn't *just* about reducing delays—although it will certainly do that. And it isn't *just* about improving civil aviation's environmental stewardship—although that too will be a welcome benefit of NextGen's implementation. It isn't even about the added margin of safety NextGen technology will bring to our complex system of communication, navigation and surveillance. NextGen is no single thing . . . it's all of these things. And I would like to explain why we believe it is critical and why the benefits of NextGen may be closer than we think. NextGen is critical to our economy now. To delay or fail to implement the NextGen system risks the U.S. aerospace industry's position as the Nation's pre-eminent manufacturing exporter (approximately \$95 billion annually). It has the potential to cost the Nation about \$35 billion in annual economic loss by 2014, and approximately \$52 billion in annual economic loss by 2024 just in unmet demand.¹ If aviation growth is constrained, job growth suffers. Employment trends in aviation-related industries indicate a possible loss of as many as 2 million new jobs every 5 years.² Only through NextGen will the U.S. retain its global aeronautics leadership, which affects not only aviation but numerous other indus-

¹JPDO.

²AIA projected estimates based on industry forecasts, incorporating lower commercial airline employment expectations.

tries and businesses as well because of aviation's extensive ripple effect throughout the economy.

Environmental Benefits of NextGen

Addressing climate change is high on everyone's agenda, including those of us in aerospace. We view NextGen and environmental improvement as inseparable. Air traffic control delays waste millions of gallons of fuel annually. For instance, more than 4.3 million hours of delays in 2007³ consumed an additional 740 million gallons of jet fuel, costing carriers more than \$1.6 billion. This produced approximately 7.1 million metric tons of carbon dioxide.⁴ It's simple math—a more efficient system means less fuel burn. And less fuel burn means less CO₂ emissions.

The cost to the airlines and the cost to the environment are simply unacceptable, especially when we all know they can be significantly reduced. Delays cost the traveling public as well—billions of dollars in lost productivity. And consider, too, that these are unnecessary costs to consumers. Manufacturers are designing and building 21st Century aircraft. However our air traffic system has not moved into the 21st Century—it is virtually the same system in which the noisier, dirtier aircraft of the 1960s flew.

NextGen will create system efficiencies that will help reduce aviation's contribution to climate change. Forty years of innovative engine, airframe and avionics design have vastly improved aviation's noise and carbon footprint. Compared to the 1970s, ninety percent fewer people are impacted by aircraft noise today. And modern civil aircraft are seventy percent more fuel efficient than they were in the 1960s.

But these improvements have come mostly from technological and procedural improvements within an air traffic system that has not changed fundamentally in more than forty years. It is now time to bring our National Airspace System into the 21st Century.

NextGen is Now

I tell you about aviation's past success as prelude to what we can do in the near future. President Obama has identified implementation of NextGen as a national priority. Recently, Secretary of Transportation Ray LaHood has said that the Administration might be willing to ask Congress to provide extra funds to accelerate NextGen if the FAA and industry can articulate a roadmap that would shorten NextGen implementation to years instead of decades. Industry stands ready to do its part and support FAA on several important fronts. First, FAA needs to define standards and specifications for NextGen applications not yet certified for NAS-wide use, like Automatic Dependent Surveillance-Broadcast (ADS-B) "In," for example. Next, FAA needs to focus its certification of new performance-based procedures at airports and in regions that have the most traffic and delays. Many of NextGen's new operational procedures and technologies will shorten flights, reduce fuel burn, produce quieter approaches and departures and they are available today.

Once we have identified the equipment that can be installed and the procedures that can be put in place, we can predict when and where we will begin collecting benefits. Every airport where performance-based approaches have been installed has demonstrated substantial economic, environmental and delay reduction benefits in the first year of operation. For example, Delta Air Lines reported combined fuel and operations efficiencies of \$34 million in the first year after FAA added two RNAV departure posts at Atlanta Hartsfield International Airport.

NextGen technologies will also bring efficiencies to the en route structure. Lockheed Martin's En Route Automation Modernization (ERAM) system will enable the FAA to increase capacity and improve efficiency in a way that is impossible with the current system, which cannot be expanded. The ERAM system adds capabilities needed to support the evolution to NextGen. ERAM is currently scheduled to be operational throughout the Nation next year—not decades from now. My friends in the airline industry can go into the details, but these are big savings. When translated into dollars, they can make a huge difference to an industry struggling through difficult times. NextGen can do this, but not without the resolve of this committee, the FAA and the entire civil aviation community.

ADS-B has the potential to reduce delays, reduce fuel burn through more efficient routings and increase capacity—all while improving safety. ADS-B will provide pilots and controllers with better situational awareness, which will substantially reduce runway incursions and enhance traffic flow. But this can only be achieved if

³Delay measurement excludes padding of block times to increase on-time performance; *ibid*, p. 3.

⁴*Your Flight Has been Delayed Again*, emissions during taxi and flight time, p. 5.

the current and future fleet of commercial and general aviation aircraft have the on-board equipment to use this technology.

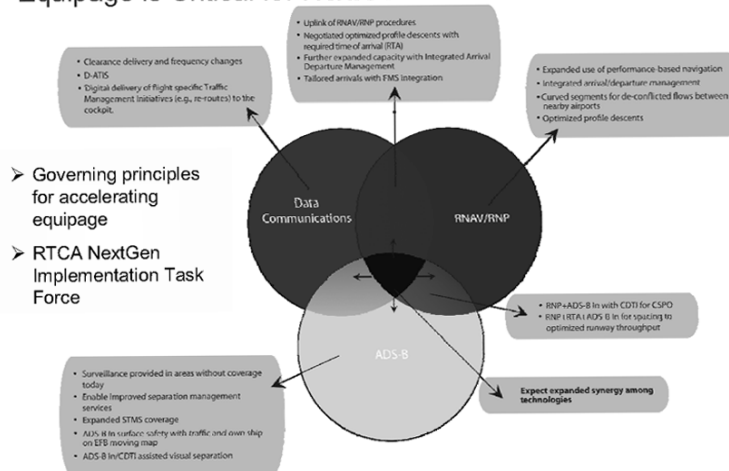
While these new capabilities will enhance safety, their accuracy will also allow closer separation of aircraft. This will increase system capacity, maintain safety and deliver economic benefits. These economic benefits are critical for operator investment in NextGen avionics equipment. ADS-B can also provide surveillance to areas without radar coverage such as the Gulf of Mexico, safely reducing aircraft separation over the Gulf from 100 miles to a standard 10-mile en route separation.

Any doubters of FAA's ability to deliver these new capabilities should take note that in 2008 the General Accounting Office removed FAA modernization from its list of "high-risk" Federal programs. Further, the Office of Management and Budget's project management tool called the Earned Value Management (EVM) system (for Federal contracts of \$10 million or more) has given the ITT ADS-B contract a score of .97 out of a possible 1.0 for deployment of ground infrastructure and an above perfect score of 1.04 for being under budget.

I also want to draw attention to the growth of the use of unmanned systems for civil missions and the importance of their integration in the NextGen system. Even now, Unmanned Aircraft Systems (UAS) are being used by Customs and Border Protection for surveillance and border patrol. They have the potential to support first responders in disaster relief, provide important weather data and are a cost-effective solution for local law enforcement in a variety of missions. AIA is encouraged by the FAA's efforts to provide a means to operate these aircraft in the NAS, while working to establish safety and operating standards. If the FAA hopes to meet current and projected demand for more routine military training missions as these aircraft return from Iraq and Afghanistan, and support other government agencies in their missions, adequate certification resources must be made available. With the projected demand in UAS services in the coming years, AIA encourages Congress to provide these resources and place more emphasis on this important issue.

Accelerate to NextGen

NextGen Implementation Plan Equipment is Critical for NextGen Success



Source: Federal Aviation Administration

As the above excerpt from FAA's NextGen Implementation Plan shows, in order to accelerate NextGen, we need to address three critical areas. Failure to fully implement any one factor means the full benefits of NextGen will not be realized. Therefore, Congress must ensure that all three areas are funded or developed in concert. And, critically, we need a critical mass of user equipage to begin to realize system benefits of NextGen. We must also install ADS-B transmitters across the Nation for full coverage, and install Performance-Based Navigation (PBN) procedures at every airport currently capable of accommodating instrument flight rules traffic.

Although the system will always evolve, FAA projects all currently planned aspects of NextGen will be fully operational in 2025. To achieve most of the benefits,

I believe we can do much better than 2025, but even under an accelerated schedule, NextGen is a multi-year, multi-billion dollar, nationwide transformation. It is not something that can be accomplished 90 days at a time. Yet, that is how we've treated the FAA's funding and expenditure authority for almost 2 years. As FAA is dependent on periodic legislation to modify, sustain and improve this essential program, the start-stop process of funding and authorization is impairing the ability to rebuild our aviation infrastructure.

What few realize is that many of these systems are available today. With near-term benefits within arms reach, AIA and its industry partners call on this Committee, this Congress and the Obama Administration to pursue the modernization of the air transportation system as the national priority that it is. While this may sound daunting, it is imperative that we continue to flesh out the near term opportunities, and the almost 300 companies that make up AIA believe this is possible by addressing the two key points of modernization—Infrastructure and Equipage.

Near-Term Opportunities: Infrastructure

In order to increase the availability of performance-based navigation at airports, AIA recommends the inclusion of proper resources for the FAA Office of Aviation Safety to certify and oversee performance-based procedures developed by third parties. History tells us that huge improvements in efficiency—both economic and environmental—follow at airports that install performance-based navigation procedures. Technologies and procedures can be deployed to save fuel and reduce emissions. Required Navigation Performance, Continuous Descent Arrivals or Tailored Arrivals and Ground-Based Augmentation Systems are three technologies that have been shown to provide significant environmental benefits.

Required Navigation Performance and Continuous Descent Arrivals

Performance-based navigation using Required Navigation Performance (RNP) and Area Navigation (RNAV) relies on Global Positioning System (GPS) and inertial navigation technology to allow aircraft to fly accurate paths independent of classical ground-based navigation infrastructure. This enables flight paths between cities that are more direct, with fewer miles flown, and approach and departure procedures that are shorter and involve little, if any, intervention from air traffic controllers. The result is significant decreases in distance and time flown. Practical, 'real world' demonstrations of RNP's effectiveness abound:

- Australia's Qantas Airlines, for example, has its fleet of Boeing 737s flying more than 100 RNP procedures each day. These procedures in Brisbane alone cut approximately 15 miles and more than 1,600 pounds of CO₂ emissions on every approach.
- Southwest Airlines recently operated a Boeing 737 demonstration roundtrip between Dallas Love Field and Houston Hobby using RNP procedures, yielding 904 pounds of carbon dioxide savings, part of its \$175 million program to implement RNP fleet-wide.
- Since 2005, Alaska Airlines, an early RNP pioneer, has documented 5,300 flights that avoided diversions by using RNP procedures. In 2008, these 'saves' resulted in cost savings of \$8 million.

Another procedural improvement that doesn't always require the use of RNP, but generates substantial efficiencies is Tailored Arrivals (TA). These procedures couple the *lateral* accuracy provided by RNP with the *vertical* accuracy provided by the aircraft's Flight Management System (FMS) and flight controls. The flight path is coordinated with air traffic control via data link communications. The resulting descent is flown from cruise altitude to final approach with few, if any, level segments and the engines operating continuously at or near idle power.

- UPS uses these procedures at Louisville, with reported savings of between 250 and 465 pounds of fuel (37–69 gallons, 780–1,456 pounds of CO₂) per arrival.
- SAS Airlines have flown more than 1,300 Continuous Descent Arrivals to Arlanda, Sweden, with average fuel savings of 410 pounds of fuel (60 gallons, 1,279 pounds CO₂) per arrival.
- Tailored Arrivals have reduced fuel use by nearly 2 million pounds (or 1 million kilograms) and CO₂ emissions by 6.3 million pounds (or 3.1 million kilograms) over a year at San Francisco International Airport. The data cover 1,000 flights by 777s and 747s from six airlines.

Operational use of these capabilities should be accelerated, in accordance with the following implementation metrics:

- *First and foremost, accelerate developments of system requirements so both government and industry can comply before 2020 deadline.*
- *Performance based navigation procedures should be deployed at the 35 Operational Evolution Partnership (OEP) airports by 2013 to include where applicable RNAV/RNP, CDA and Ground-Based Augmentation System (GBAS).*

Near-Term Opportunities: Equipage

As you know, efficiencies, delay reductions and environmental benefits are directly related to the number of aircraft equipped to use performance-based procedures once they are installed at a congested airport. The more aircraft equipped to use these new procedures, the higher the benefits. It's as simple as that. No matter how many systems are operational, efficiencies will inevitably depend on an operator's commitment to equip aircraft.

I would like to echo the sentiment of the GAO who earlier this year reported that without widespread user equipage, system-wide economic and environmental benefits of NextGen will not be realized. While I appreciate this Committee's support of equipage incentives in the economic recovery package, it is a shame that billions of dollars were obligated for national infrastructure priorities, but outside of money for airports, we spent virtually nothing on the global transportation infrastructure of the 21st Century—air transportation modernization. We have near-term, “shovel-ready” infrastructure improvements we must make to our fifty-year-old air traffic control system that will benefit our economy both immediately and for the next 50 years. Government and industry experts alike have long held that aircraft equipage is the “long pole in the tent” to achieve this overdue transformation of our national airspace system. If commercial and general aviation aircraft are not equipped with NextGen-enabling avionics, implementation will not succeed.

We need a two-pronged strategy with regard to user equipage. First, we need to make the purchase and installation of NextGen avionics economically viable in this difficult fiscal environment. The cost for these critical avionics components is prohibitive—especially the expensive and time-consuming process of retrofitting the current fleet. Second, we need to define NextGen's economic and environmental benefits in a way that makes the equipment purchase defensible to corporate boards and shareholders. The government should not mandate the purchase of new equipment if it is not prepared to commit to its benefits at a point in time. Below is a list of avionics equipment and procedures that will enable NextGen. These are already in use and some, such as Trajectory-Based Operations (TBO) and Closely Spaced Parallel Operations (CSPO), will provide additional benefits down the road.

- ADS-B
- RNP Equipage
- FAA RNAV/RNP Procedure Development
- FAA LPV Procedures Development
- Electronic Display Upgrades (including Electronic Flight Bags)
- GBAS

A few details on some of these capabilities may be helpful:

- Automatic Dependent Surveillance-Broadcast (ADS-B)—ADS-B is a critical component for advancing a next-generation air transportation system. By relying upon satellite and additional technology, ADS-B enables an aircraft to constantly broadcast its current position simultaneously to air traffic controllers and other aircraft. Tremendous safety, security, capacity and environmental improvements are realized. ADS-B has two components—ADS-B “Out” and “In.” ADS-B “Out” continuously transmits an aircraft's position, altitude and intent to controllers. ADS-B “In” is the reception of the transmitted data by other aircraft, which allows pilots to have a complete picture of their aircraft in relation to other traffic.
- Required Navigation Performance (RNP) procedures (higher performance RNAV)—monitors aircraft performance, enables closer en route spacing without intervention by air traffic control and permits more precise and consistent departures/arrivals. Another immediate infrastructure improvement is available with investments in precision satellite-based instrument approaches, called Localizer Performance with Vertical (LPV) approaches. LPV approach procedures improve safety and provide all weather access at thousands of general aviation airports.
- Area Navigation (RNAV)—enables aircraft to fly on any path within coverage of ground or space-based navigation aids, permitting more access and flexibility for point-to-point operations.

- **Ground-Based Augmentation System (GBAS)**—GBAS is the next generation technology to support precision landings. It provides additional information to aircraft to allow GPS to be used for landings in low visibility conditions. Due to limitations with current ILS equipment, airports routinely lose capacity as visibility decreases. Fifteen of our top U.S. airports experience greater than 25 percent reduced capacity when ceilings are below 200 feet. In these situations, aircraft often waste time and fuel by waiting in holding patterns or, even worse, diverting to alternate airports. This minimizes schedule disruptions due to weather and also enables more environmentally friendly procedures and increased safety during ground operations.

AIA recommends the development of equipment incentives or general fund grants that will increase the population of NextGen equipped aircraft at a rate of at least 20 percent annually at the 35 OEP airports.

Performance Metrics

As with any highly productive operation, NextGen implementation must remain subject to constant oversight by all stakeholders, including Congress, FAA and industry. We encourage FAA to develop, publish and use a simple and clear set of progress-based metrics with 20-year targets and yearly objectives to determine if NextGen plans and implementations are actually achieving the Nation's air transportation objectives. In doing so, industry believes the true test of the initiative's effectiveness in accomplishing the mission set forth under Vision 100 can be weighed against the following questions:

- Are we continuing to improve safety?
- Are we reducing aviation's contribution to climate change?
 - Are we reducing noise and emissions?
 - Are we increasing efficiency by making routes more direct and shorter in time?
- Are we increasing capacity by better using the runways we have and adding more runways where needed?

Specific metrics are being developed to measure progress in these areas. We would be pleased to share these metrics with the Committee. It is important that we track progress of the operational impact of NextGen, not just the programmatic accomplishments.

The Funding Dynamic

Since the current reauthorization expired at the end of FY07, FAA has been funded by a series of continuing resolutions and extensions. FAA is a 44,000-employee organization responsible for a multi-billion dollar operation that touches virtually every part of our Nation's commercial economy. If FAA were a private entity, it would be a Fortune 500 company, yet we expect it to sustain excellence and global leadership without long-term authority or stability in its programs and funding.

Much of what is needed for NextGen falls under the category of "new starts," which, as you well know, are prohibited under short-term continuing resolutions. A large number of FAA NextGen pre-implementation issues, including development and acquisition decisions, have been adversely affected. Failure to fund these NextGen development and application programs as a national priority has a disastrous domino effect on near-, mid- and long-term NextGen efforts. We cannot continue this. We have to accept the responsibility of providing cutting-edge air transportation system services on a schedule that is not constantly sabotaged by funding battles. And underlying this is a basic question: Will the U.S. commit to retaining its global leadership position in civil aviation, or will it cede the "gold standard" in aerospace technology development and deployment to the EU, Australia or Canada?

It is critically important that we keep pace with the rest of the world in our modernization efforts to maintain any hope of creating a globally harmonized air traffic system. Whoever sets the standards for equipment and procedures will define the global system. If we want to maintain a leadership position in this market, we need to be in the vanguard of air transportation system modernization. And let's not forget that although NextGen has entered the implementation phase, delayed funding of NextGen R&D will push the timeline further to the right while the European system—Single European Sky ATM Research Programme (SESAR)—and others are moving ahead smartly.

Like other modes of transportation recently gaining considerable support for modernization and expansion, advancing NextGen must be a national commitment. While industry is pleased to hear that the Administration is committed to advancing NextGen, funding must be sound and sustainable for the initiative to become a re-

ality. Because the air traffic control system provides important public policy benefits to our citizens and the military, it is appropriate for the General Fund to fund FAA operations.

Delaying the development and deployment of NextGen is harmful for two simple economic reasons. Every year that R&D work is delayed, the costs of the work increase. Additionally, every year that NextGen is delayed, our economy is denied the benefits of an improved ATC system—and that costs more in fuel, delays, environmental benefits, etc. The cost to promptly and fully fund NextGen is far less than the cost of delay.

Safety and Security of Foreign Repair Stations

I would like to stress the aviation industry's commitment to safety and security at repair stations around the world. As you know, aviation is a global industry and requires an international network of safe and secure repair stations.

AIA is particularly concerned about pending language in the House FAA Reauthorization Bill, which sets a minimum number of inspections by FAA personnel. Our industry operates foreign repair facilities that welcome inspections and oversight by the FAA. Our facilities are constantly inspected by the FAA, foreign aviation authorities, our air carrier customers and by our internal auditors. However, requiring the FAA to inspect each foreign repair station "not fewer than two times" annually presents several problems.

First, the FAA does not have the resources or the inspection personnel required to inspect every foreign repair station with such frequency. Because of this challenge, I believe the agency should employ a risk-based model for inspections in order to use its valuable personnel in the most efficient manner possible. It makes more sense to send additional inspectors to facilities where safety oversight may be called into question rather than use these resources carrying out redundant inspections in locations that have exemplary safety records. Equally concerning is the premise that any foreign repair station that the FAA fails to inspect twice annually—whether or not it is in compliance with FAA safety rules—would lose its FAA repair certificate. This is fundamentally unfair since repair station operators have no ability to control FAA's oversight operations.

Second, the inspection requirement undercuts the U.S.-European Union (EU) Bilateral Aviation Safety Agreement (BASA), raising the possibility of retaliatory trade practices from one of our most trusted trade allies. This agreement, as a general rule, requires reciprocal maintenance oversight (*i.e.*, the FAA provides surveillance of U.S.-based EU-certificated repair stations and vice versa). The concept is by no means revolutionary. As a matter of fact, the FAA has operated under reciprocal maintenance agreements with European nations for more than 35 years.

As proposed, this language, will lead to reciprocal actions, ending implementation of the BASA and abrogating existing and future Open Skies agreements. In recent communications, EU officials stated that reciprocal actions will have a significant impact upon three additional areas of focus for international cooperation: acceptance of FAA certification of European pilots (an industry generating \$72 million in annual domestic revenue); acceptance of FAA certification of U.S. airlines entering European airspace (a move that would require domestic airlines to undergo and pay for EU certification prior to flying their profitable transatlantic routes); and an increase in the fees and charges assigned to U.S. aviation manufacturers for EASA validation of products certificated by FAA.

Should these actions come to fruition, U.S.-based repair stations would be subjected to additional certification fees, risking the ability to repair European registered airplanes, all of which could result in a significant loss of business and employment here in the U.S.—an outcome devastating to the hundreds of small businesses that comprise the aviation maintenance industry. As the U.S. currently has a positive balance of trade in repair work with the EU—with 1,237 U.S.-based repair stations certificated to repair EU-registered airplanes, and only 708 FAA certificated repair stations around the world (including 425 in the EU)—domestic operators stand to lose far more work than we could ever hope to gain.

In addition to the certification of repair stations, another consequence of backing out of the U.S.-EU agreement is the risk of jeopardizing our access to foreign markets. As stated earlier, the aerospace industry provides the largest trade surplus of any domestic manufacturing industry. A large part of this success rests with our ability to easily export products overseas. In addition to safety oversight, the bilateral provides for reciprocal certification of aircraft. It can take up to 5 years for a new aircraft to go through the FAA certification process. Under the agreement, the EU accepts the FAA's certification which allows for instant access to their markets. Without this, our manufacturers would have to go through a separate certification

process for every European market—an effort that would cost time, money and jeopardize our export base.

We will send our bi-lateral partners a terrible message if we violate this safety agreement. After decades of cooperative oversight, we would signal our lack of faith in their work. Doing so would slight our European partners, undermine the FAA's credibility and make it harder for the FAA to maintain its worldwide leadership on safety issues.

The importance of this agreement simply cannot be overstated. The U.S.—EU safety agreement will serve as a foundation for future negotiations in areas such as licensing and operations that have huge economic impacts for U.S. industry. To endanger this agreement through foreign repair station legislation risks future economic growth and job creation in our country.

For these reasons, I respectfully ask the Committee to take my comments into consideration and continue to examine this issue and its ramifications for the aerospace industry and workforce.

Conclusion

It is important to note that NextGen progress has expansive ramifications for our national economic growth, job creation, and environmental benefits. Aviation is the glue that holds the high-value global economy together. It has been described as the physical internet. More than surface or water transportation, civil aviation has a tremendous ripple effect on our economy. For every dollar invested or job created in aviation, 2.6 to 4 more are created. Aviation carries only 2 percent of the world's goods—but 40 percent of the value.

FAA and industry are presented with significant funding challenges. But government, industry and many lawmakers are united on one issue—increased funding of FAA from the General Fund is needed to cover FAA operations and to pay for NextGen. While the recently approved omnibus bill increases the General Fund allocation from 18 percent to 24.6 percent that is just enough to pay current FAA expenses, what is required is a general fund contribution well above 25 percent that supports full NextGen implementation.

The important point is that NextGen cannot, must not, be deferred—it has to be developed and implemented concurrently with full funding of FAA's present operational and capital needs. FAA and industry both must be held to account. We must have concrete measures to assure that our investment is producing results. In this time of limited resources, both the private and public sectors must be extremely judicious in our expenditures, but we need to act boldly. There is no doubt of the public benefit that will be gained, and the boost to economic and job growth, that will come from timely and full funding of FAA and NextGen needs.

Senator DORGAN. Ms. Blakey, thank you very much.

Next, we'll hear from Mr. Jim May, who is the President and Chief Executive Officer of the Air Transport Association of America.

Mr. May.

STATEMENT OF JAMES C. MAY, PRESIDENT AND CEO, AIR TRANSPORT ASSOCIATION OF AMERICA, INC. (ATA)

Mr. MAY. Thank you, Mr. Chairman. I appreciate the opportunity. As always, it's a pleasure to be here and especially with my esteemed colleagues.

Airlines, manufacturers, business and general aviation airports, controllers, organized labor, and others are committed 100 percent to working with you, the Administration, and, most importantly, I think, each other to try and ensure successful passage of FAA Reauthorization.

Reauthorization of FAA programs and funding must ensure that ATC modernization will be done early and by that I mean several years rather than several decades, right, and in a way that transforms air travel in this country.

If done right, modernization will be transformational for our entire economy, reduce over \$40 billion a year that flight delays cost

the economy every year, allow planes to fly more direct, efficient routes, significantly reducing fuel burn. That's economy, and CO₂ emissions. That's a better environmental footprint.

It'll create and retain good jobs that cost the aviation sector and a host of other businesses that depend on efficient air transportation and will ensure the United States remains the global leader in safety, security, environment and foresight. It's a win-win for Congress, the Administration, and the public, and ought to be the cornerstone of our reauthorization efforts.

Now to move forward, let's talk a little bit about what we mean. Aviation has a plan. I think it's straightforward and it's doable. It envisions that we should agree to the right leadership and funding. We can transform the ATC, the Air Traffic Control System, in 3 to 5 years, not 3 to 5 decades.

I think we can agree that the key ingredients to what I'll call NowGen are aircraft equipment, ground infrastructure, FAA procedures and standards, training and, most importantly, cooperation among all the stakeholders.

Third, that the key capabilities we need today and tomorrow are ADS-B in and out, that's the satellite navigation, RNAV and RNP, electronic display upgrades to help pilots better see where they're moving on the runway and to open up new flight paths, GBAS, ground-based augmentation systems, to provide better visibility in poor weather, and LPV, which are procedures that improve safety in all-weather access to general aviation airports.

Fourth, since ATC modernization benefits the entire nation, we think it should be paid for out of General Fund, a national infrastructure bank, as some have suggested, or innovative government financing or stimulus—something that isn't going to come from a beleaguered trust fund.

So why not turn to that Trust Fund? Well, data and common sense tell us that the revenues are not going to be as large as expected. About a half billion dollars less will be collected this year as opposed to last year. There will be reduced capacity, fewer flights, lower fares, and about a half million fewer flights this January than January a year ago and that's going to impact the revenues for the fund.

Some predict the Trust Fund balance will zero out by 2010 with no discretionary or uncommitted funds available. General Fund contributions have averaged 38 percent since 1971, but it's now down to 16 percent. We think we need roughly \$6 billion additional investment in NowGen over the next few years and, quite frankly, the Trust Fund is not prepared to handle that kind of an infusion.

So not only is the Trust Fund not the answer to accelerating ATC modernization, I think it remains an unreliable, unfair funding vehicle for the FAA. Commercial airlines and their customers still contribute more than 90 percent of the Trust Fund revenue, even though we impose less than 70 percent of the costs of the Fund to the system.

In addition, airlines and their customers, through PFCs, AIP money and airport rates and charges combined, spend nearly \$13 billion a year underwriting airport expenses exclusively. That means that the airlines and their customers together spend over

\$20 billion underwriting a combination of the Trust Fund and airports.

Now that's from an industry whose total market capitalization on the passenger side is about \$18.5 billion. It's unreal. Now we don't question the airports' need for sufficient funds, but in today's economic environment, their continued push for higher PFC and AIP funds, I think, is out of sync with economic reality. It isn't a spending issue, it's a funding issue.

So I think it's time, then, instead of looking at the Trust Fund all of the time, to look at innovative funding sources, reprogramming stimulus dollars, FAA bonding authority to issue tax credit bonds which have been a reliable way to leverage funds to accelerate modernization, infrastructure banks, more stable funding, and, finally, I think to do it, we need to have everyone back at the table.

In conclusion, Mr. Chairman, ours is a challenged industry. We've endured successive hits on our operation caused by high fuel prices, worldwide economic crisis and even the impact of H1N1. Last year we lost \$8 billion.

I say this not seeking sympathy, but recognition that we're dealing with those challenges. We've cut capacity, jobs, planes; 500 jobs were eliminated in Florida by one of our carriers today, and our ask is simple. Help us invest in our future, which is NowGen, and resist those that see airlines and our passengers as the aviation equivalent of an ATM machine.

Thank you.

[The prepared statement of Mr. May follows:]

PREPARED STATEMENT OF JAMES C. MAY, PRESIDENT AND CEO,
AIR TRANSPORT ASSOCIATION OF AMERICA, INC. (ATA)

Overview

Federal Aviation Administration (FAA) air traffic control (ATC) services are central to the ability of airlines to operate efficiently and, ultimately, sustain timely, reliable, economically viable air service for their customers. Airline operations only can be as efficient as the ATC system allows. Inefficient services drive unnecessary costs for airlines and their customers—both passengers and shippers. Today's ATC services are woefully inadequate, depriving the flying public—and the U.S. public-at-large—of substantial economic and environmental benefits.

Likewise, the outdated policies underlying how ATC services are funded unfairly burden the U.S. airline industry and hinder its competitive standing in the global aviation marketplace. The current cost recovery methodology does not accurately reflect the extent to which different users consume ATC services and drive resultant costs. Consequently, government data show that the aggregate annual financial contribution made by airlines and their customers for ATC services significantly exceeds the costs they impose when utilizing Federal ATC services.

Now is the time for Congress to make the infrastructure and funding policy changes needed for U.S. airlines to achieve consistent operational integrity, improve customer service, reduce environmental impacts and enable U.S. airlines to compete effectively against global competitors. ATC modernization is critical to improving the fuel efficiency of flight operations, reducing fuel-related emissions and reducing energy costs. FAA reauthorization offers Congress the opportunity to lead on these important issues and to enable much needed change:

- Change technology—modernize the ATC system as quickly as possible and revise operating ATC procedures to reap the benefits.
- Change ATC funding—embrace equitable cost-based funding so that the airline industry does not subsidize other user groups.
- Change infrastructure development funding—enable innovative financing.

- Change aviation's environmental impact—ATC modernization will enable material improvements in fuel efficiency and a corresponding reduction in emissions.
- Change philosophy—recognize that airlines are modern, publicly-owned businesses that will not be able to improve wages and benefits for employees and attract much needed capital if financial stability continues to remain elusive.

ATA's primary goals for FAA reauthorization are: (1) program authority and funding for FAA to swiftly transform the ATC system into a modern, satellite-based system, including authority for research and development, innovative financing mechanisms for modernization equipment acquisition and deployment, support for aircraft equipage and asset/human resource management to capture cost savings; (2) an ATC cost-recovery structure that allocates costs to user groups in proportion to their use of the system; (3) an Airport Improvement Program (AIP) structure that does not use funds derived from airlines and their passengers to subsidize noncommercial airport development—our point here is not that noncommercial public-use airports do not deserve funding, but merely that funding should be public-source funds such as the General Fund; and (4) a forward-looking national aviation policy to address the many challenges facing the industry.

A Healthy Airline Industry Stimulates the U.S. Economy

As we have noted on many occasions, the U.S. airline industry is not simply an important sector of the national economy; its services drives our entire economy. Air transportation is an indispensable element of America's infrastructure and our Nation's economic well-being. The airline industry is the foundation of the commercial aviation sector, which comprises airlines, airports, manufacturers and associated vendors. *U.S. commercial aviation ultimately drives more than \$1 trillion per year in U.S. economic activity and more than 10 million U.S. jobs.*¹ By any measure, the U.S. airline industry is a valuable national asset and its continued economic health should be a national priority.

Recent events illustrate the positive impact that a healthy industry can have on our national economy. Prior to the fourth quarter of 2008, U.S. airlines transported more than two million passengers on a typical day, operating approximately 30,000 flights per day and directly employing more than 500,000 people to do so. Airlines were forced to reduce operations and staffing in the fourth quarter of 2008 due to the meteoric rise of jet fuel prices earlier that year. As a result, the industry lost an estimated \$8 billion in 2008. Because of the current recession, airlines have been unable to restore those operations and jobs, and now employ less than 500,000 people,² with the prospect of further cutbacks if the economy continues to falter or if more external shocks like the 2009 H1N1 virus occur. On April 21, 2009, the Bureau of Transportation Statistics (BTS) reported that scheduled passenger airlines employed 6.6 percent fewer workers in February 2009 than in February 2008, making eight consecutive months of job losses in the industry.

It is clear from these events that a healthy industry drives high-paying jobs that, in turn, can help drive the economy back to health. For this reason, government policies in all areas should foster financial stability and growth in the airline industry. Commercial air service also is critical to the small communities of our Nation. For this reason, we firmly support the continuation of a strong Essential Air Service Program.

The U.S. airline industry cannot sustain its vital role of transporting people and goods, and continue to be a national economic engine, if the government infrastructure that it depends on, the ATC system, remains an impediment to efficiency and growth. U.S. airlines risk becoming a wasting national asset if the industry's fundamental features—speed, dependability and efficiency—are undermined by an obsolete ATC system.

Modernization Is Needed Now: from NextGen to NowGen

All sectors of the broader aviation industry—airports, airlines, business aviation, manufacturers, passengers and shippers—agree that the FAA ATC system is badly in need of modernization and that the FAA Next Generation Air Transportation System (NextGen) is needed now. The current ATC system has reached the limits of its capabilities, is expensive to maintain and is labor intensive to operate. In several areas of the country, most notably in the Northeast, the system is unable to provide the capacity needed to meet the demand for ATC services at peak periods and at times of severe weather conditions. With FAA forecasting significant long-term

¹FAA Air Traffic Organization, *The Economic Impact of Civil Aviation on the U.S. Economy*, October 2008.

²The industry has lost 151,000 FTEs from its peak employment in May 2001; 28,000 jobs were lost in 2008 alone.

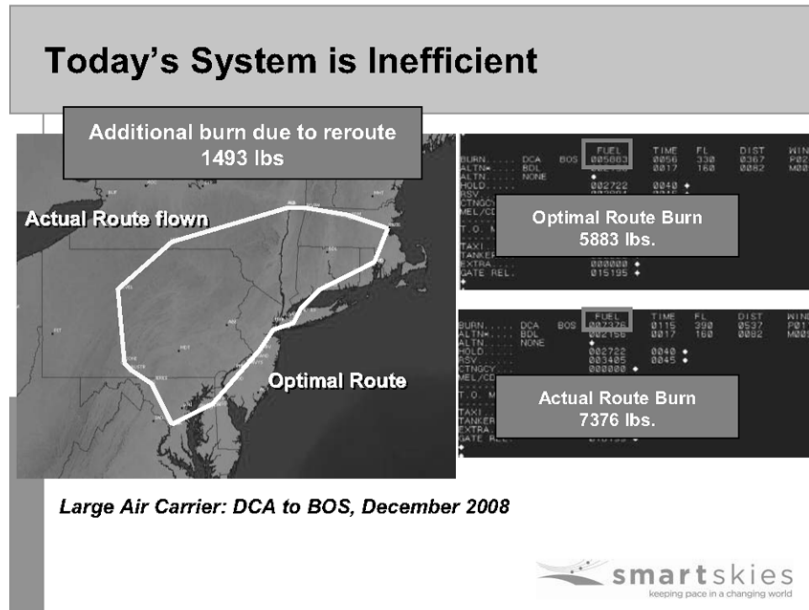
growth, it is critical that modernization initiatives be implemented as soon as possible. The current recession may delay that growth, but it will be only a short respite that we cannot afford to waste. Indeed, now is the right time to accelerate several key NextGen components to drive “NowGen,” which will deliver many of NextGen’s benefits much sooner.

NextGen

NextGen, which will employ a number of new technologies in a satellite-based air traffic management system, coupled with new operating policies and procedures that take advantage of these technologies, will provide tremendous improvements over the current system and will benefit all system users passengers and shippers, the public in general and the U.S. economy. Public benefits include improved operational efficiency, reduced fuel consumption and emissions and lower operating costs for airlines. NextGen will provide several critical needs:

- **Efficiency and Productivity.** NextGen will enable more efficient flying. Today’s ground radar system requires planes to fly over specific points on the ground to maintain radar and communications contact. Navigational aids, radar and controllers are all terrestrial. They are linked to form a complex network system that supports airways, through which aircraft fly. Today’s system also requires spacing to accommodate the time it takes for radar to detect objects. Consequently, aircraft fly indirect routings and aircraft spacing—required for safety—wastes capacity. Today’s ATC system cannot, and never will be able to, take full advantage of available technology or integrate and fully exploit emerging technology.

The environmental and economic impact of today’s inefficient ATC system is illustrated below. The flight in this example burned an additional 1,493 pounds of fuel (218 gallons), releasing an extra 4,560 pounds of carbon dioxide (CO₂) and adding unnecessary cost when margins already are razor thin.



In contrast to today’s ATC system, NextGen will enable: optimized, direct routings between airports; reduced aircraft spacing; continuous descent arrivals, precise arrival and departure routings (known as RNAV and RNP procedures), and closely spaced approaches on parallel runways in instrument flight rule conditions. These are just a few of the operational benefits of NextGen.

These efficiency enhancements will drive significant improvements in productivity—both in terms of asset utilization and personnel. That, in turn, will reduce operating costs, which will help keep fares down and enable those savings to be plowed back into wages and benefits and operating capital.

Improved ATC efficiency also will benefit private aircraft owners. Corporations use private aircraft with the expectation that such use is efficient. While we disagree with that proposition, ATC modernization will provide corporate aircraft owners the same kind of efficiency benefits that commercial airlines will enjoy if their aircraft are properly equipped. Even if they are not properly equipped, they still will enjoy a spinoff benefit simply from operating in the same airspace as more efficient commercial aircraft.

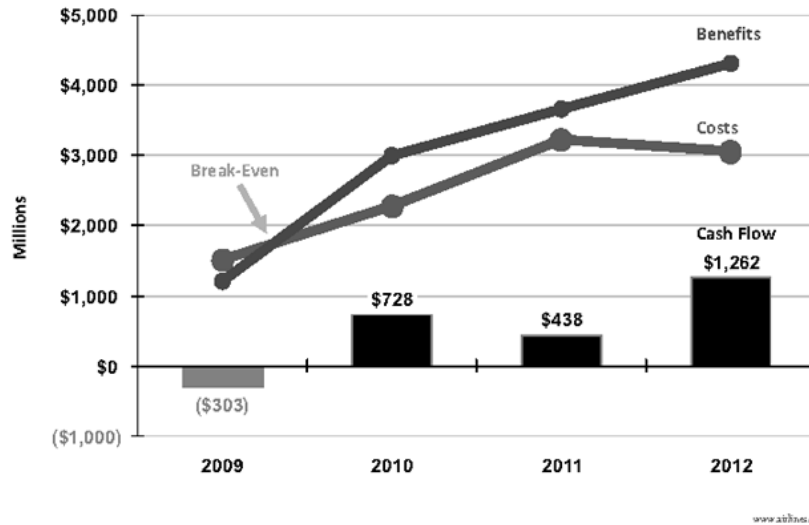
- *Environmental Benefits.* More efficient operations also will use less fuel, increasing aircraft fuel efficiency and reducing greenhouse gas and other emissions. It has been estimated that full implementation of NextGen will reduce emissions by 10–15 percent. Early implementation of certain NextGen elements and other airline initiatives are providing some benefit toward those totals already, but full implementation is needed. Improved fuel efficiency also will reduce operating costs and contribute to improved financial conditions that, like the productivity improvements discussed above, will benefit the public and employees and put the airlines in a better position to continue to invest in new aircraft, alternative fuels and other operational improvements that bring environmental improvements.
- *Capacity.* The current ATC system is saturated and, in some locations, cannot provide the capacity to meet the public's demand for convenient, safe air transportation. This situation inhibits competition and industry growth. It also is the source of unnecessary congestion and delays, and compounds the effect of weather-related delays. NextGen will enable more precise spacing of aircraft and flight paths, which will allow FAA to handle safely and efficiently the traffic growth that it forecasts.
- *Operational Integrity and Customer Satisfaction.* Closely linked to capacity, efficiency and productivity is operational integrity. By expanding capacity and enabling more efficient operations, NextGen will enable better on-time performance and improved customer satisfaction. Today's outdated ATC system contributes to delays and disruptions that could be avoided and will be avoided when NextGen is implemented. With improved operational integrity comes fewer delays, fewer missed connections, fewer misplaced checked bags and more satisfied customers.
- *Safety.* NextGen's satellite-based system will look and act much like a network to which aircraft and ATC are interconnected. It will provide more precise information to both controllers and pilots about aircraft locations, both in the air and on the ground, and will enable aircraft to constantly know one another's locations. This locational awareness and corresponding digital communications capability will provide critical real-time flight status information not available today. Some of the technology and operating procedures have already been tested and have produced dramatic results. A sharp drop in aircraft accidents in Alaska occurred under the Capstone Program, introduced earlier this decade, which utilizes ADS-B technology, a foundational technology for NextGen.
- *Scalability.* NextGen will be considerably more nimble than today's facility and labor-intensive system. Accordingly, it will be much easier for the FAA to scale the system to meet demand from all aviation sectors, whether that demand is a steady growth curve or fluctuates from time to time. Automation and digital data communications will make it easier for the FAA to adjust the system as needed.
- *Improved Financial Performance.* Modernization will respond to legitimate shareholder expectations that the airlines they invest in will earn a positive return on investment. The current ATC system hobbles the industry's ability to achieve financial stability because of the costs it drives by being inefficient. These failures lead to delays and congestion. The Joint Economic Committee found that the total cost to the economy of domestic delays in 2007 was nearly \$41 billion, including \$19 billion for airlines and \$12 billion for passengers. Delayed aircraft also drive the need for extra gates and ground personnel and impose costs on airline customers (including shippers) in the form of lost productivity, wages and goodwill. The industry cannot survive, and the public will not invest in it, if these conditions remain the *status quo*.

NowGen

By accelerating several key NextGen components and investing in proven technologies, much of NextGen can be transformed into *NowGen* to deliver immediate benefits. *NowGen* accelerates the manufacture and installation of required avionics, the installation of associated ground infrastructure and the development and implementation of new procedures. Instead of achieving roughly 12 percent fleet readi-

ness by 2012 under the existing FAA NextGen schedule, *NowGen* delivers 100 percent fleet readiness in 2012. As a result, *NowGen* delivers tremendous public benefits immediately and total benefits will exceed costs as early as 2010.

***NowGen* Benefits Exceed Costs As Early As 2010**



NowGen will work because it focuses on accelerating five key proven technologies and implementing related procedures. These are:

- **Automatic Dependent Surveillance-Broadcast (ADS-B).** ADS-B requires new equipment, ground infrastructure, airspace revisions and pilot procedures using a GPS source. The cost and complexity of equipment installation varies significantly depending on current aircraft configuration. ADS-B enables an aircraft to constantly broadcast its current position simultaneously to air traffic controllers and other aircraft. Utilizing GPS to display an aircraft's position more accurately and frequently enables more efficient use of existing airspace because aircraft separation standards can be safely reduced. Routing efficiencies reduce fuel burn and emissions.
- **Area Navigation (RNAV)/Required Navigation Performance (RNP).** RNAV/RNP requires new onboard equipment and approved procedures. Installation or upgrades to existing flight-management systems, installation of a GPS position source and integration with new and existing cockpit displays drive equipment costs. Extensive revisions to airspace and pilot procedures will be needed. RNAV enables aircraft to fly on any path within coverage of ground- or space-based navigation aids, permitting more direct operations. New flight-path procedures decrease the number of miles flown, reducing fuel burn and emissions. Like RNAV, RNP enables aircraft to fly on any path within GPS coverage, and also includes an onboard performance-monitoring capability; RNP enables closer en route spacing and permits more precise and consistent departures/arrivals.
- **Electronic Display Upgrades.** Some aircraft will require the addition of new specialized display screens to utilize ADS-B and RNAV/RNP; some will require a supplemental display, such as an Electronic Flight Bag. These screens will accurately display an airplane's position relative to itself and other aircraft. These displays can also be used to show new optimum flight paths.
- **Ground-Based Augmentation System (GBAS).** GBAS provides additional information to aircraft to allow GPS to be used for landings in low-visibility conditions, minimizing schedule disruptions due to weather and enabling more environmentally friendly procedures. It requires new equipment, ground infrastructure and procedures. Special avionics are necessary to receive the corrected GPS signal information and must be integrated with the aircraft's flight-manage-

ment system. GBAS also requires several antennas, a broadcast transmitter and a processing unit at each airport. In some cases, a single installation can service multiple airports due to its 30-mile-radius effective range.

- *Localizer Performance with Vertical Guidance (LPV)*. LPV procedures leverage satellite-based precision to improve safety and provide all-weather access at thousands of general aviation airports. Using GPS and leveraging the existing Wide Area Augmentation System (WAAS) enables more accurate flight-path guidance. Action is limited to the development, certification and publishing of procedures.

In addition to the many operational, environmental and customer-service benefits discussed above, *NowGen* also will throw off significant stimulative benefits. We estimate that *NowGen* will yield over \$12 billion in U.S. economic benefits through 2012, including \$7.4 billion in job creation—as many as 167,000 U.S. jobs distributed widely across the country. These are important societal benefits as the country struggles to recover from the current recession.

Establish Fair and Equitable ATC Funding

The ATC system is funded by its users through fees and taxes. Unfortunately, the funding structure has remained static since its creation even though system use has changed over time. Consequently, the share that each user group pays is not aligned with its use of the ATC system. It is time to repair the funding structure so that it is fair to all users and equitably charges user groups based on their use of ATC services.

In 1970 when the Trust Fund was established, airlines were the principal users of the ATC system. FAA data show 2,586 airliners were in service then compared with 1,833 corporate aircraft. Today there are almost 10,500 *more* high-performance general aviation aircraft than commercial airliners in the U.S. fleet. While this fact alone does not mean corporate and private jet operations have overtaken commercial jet operations, common sense tells us that they are much bigger users of the ATC system today than they were in 1970. And in fact, an FAA study shows that high-performance general aviation and fractional aircraft account for 17 percent of ATC costs.

Number of Aircraft	1970	2008	Growth
U.S. air carriers (all psgr. and cargo props and jets)	2,586	7,274	2.8x
Turbine-powered GA (turboprops + turbojets)	1,833	21,000	11.5x
<i>Turbine GA share of total</i>	<i>41 percent</i>	<i>74 percent</i>	<i>33 pts.</i>

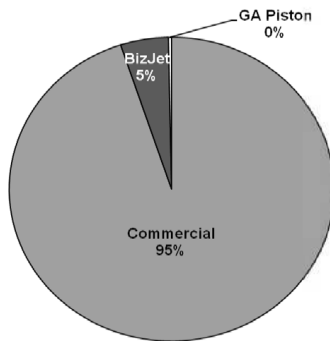
Unfortunately, the taxes and fees paid by this user group have not kept up with this dramatic growth, leading to an imbalance in payments into the Trust Fund. This imbalance in ATC system use and payments has led to an obvious and undeniable economic distortion that has airlines and their customers subsidizing business aviation.

According to data compiled by the FAA and certified by the IRS, airlines and their customers contributed \$11 billion to the Trust Fund, well in excess of 90 percent of total Trust Fund receipts, yet the FAA Cost Allocation Report shows that passenger and cargo airline operations only account for approximately two-thirds of ATC costs.³ In contrast, business jets (general aviation, turbine aircraft and fractional aircraft) contributed only 5 percent of the revenue (\$573 million) but accounted for 17 percent of the costs.⁴

³ The FAA cost-allocation study for FY 2005.

⁴ The cost-allocation study breaks it down as follows: general aviation turbine and air taxis/fractionals drove 9.7 percent and 7.2 percent of system costs respectively; general aviation piston drove 5.9 percent of system costs.

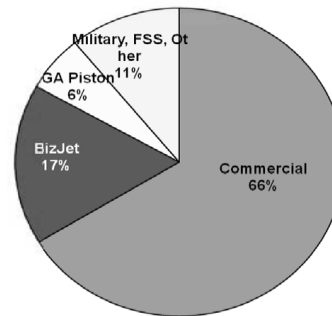
Share of AATF Revenue Contributions



■ Commercial ■ BizJet □ GA Piston

FY 2008 Estimates

Share of ATC Costs



■ Commercial ■ BizJet □ GA Piston □ Military, FSS, Other

FY 2005 Cost Allocation Study

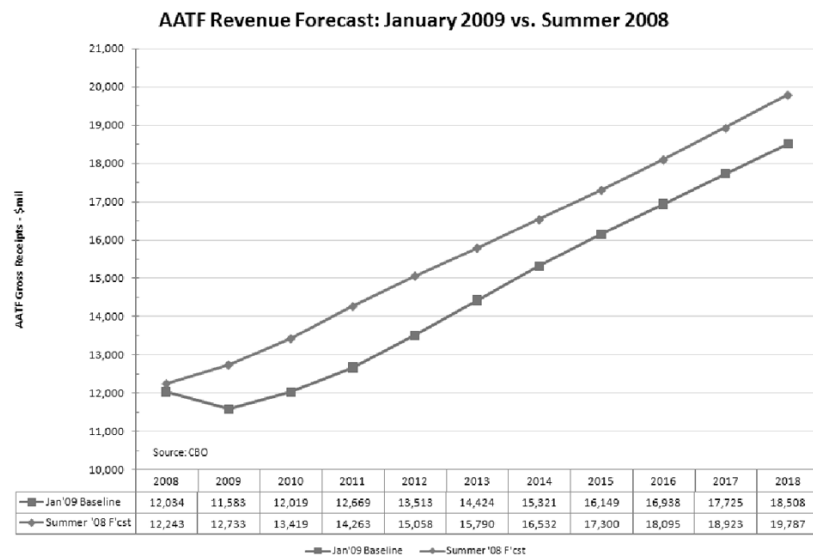
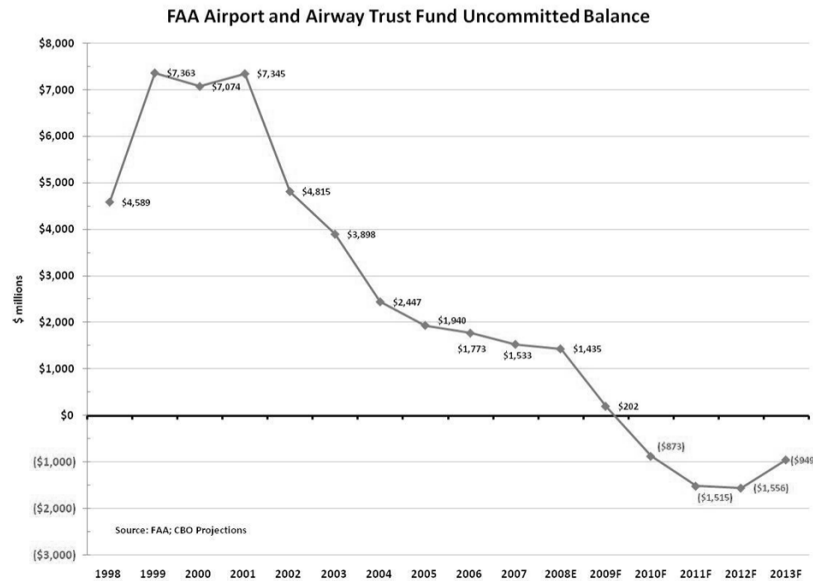
The inequity of this situation is illustrated by comparing the taxes and fees paid by a commercial passenger flight and a private corporate aircraft flight over the same route. A commercial passenger Boeing 737 flying from Washington, D.C. to Fort Lauderdale, Florida, a distance of 902 miles, would generate approximately \$1,434 in taxes and fees, assuming a load factor of 75 percent. A private Cessna C750 carrying four passengers would pay just \$112. That's more than a tenfold difference. The same aircraft on a flight from Washington, D.C. to New York City would pay \$1,007 and \$26, respectively, while a transcontinental flight from Washington, D.C. to Los Angeles would generate \$1,897 from the commercial airline and just \$287 from the corporate jet. *The irony, of course, is that the FAA provides the same air traffic control services to the commercial flights and private aircraft in these examples.* Day-in and day-out, corporate aircraft operate in the same airspace as commercial aircraft and utilize the exact same ATC services, but at a fraction of the cost.

ATA has long supported the principle that ATC system charges to different user groups should reflect each group's use of the system. We continue to endorse that principle and urge that it be embraced in FAA reauthorization legislation.

Update How Aviation Infrastructure Is Funded

The Airport and Airway Trust Fund Is at Risk

It is time to alter the traditional approach to funding FAA operations and infrastructure development from the Airport and Airway Trust Fund (Trust Fund) and passenger facility charges (PFCs). In particular, the Trust Fund is at risk. Given the recent decline in airline operations and the potential for additional cuts in 2009, near-term revenue into the Trust Fund will decline significantly. It is unclear when growth will return in light of current economic terms—it could be 2010 or even later. This situation has two important adverse effects: (a) the uncommitted balance—discretionary funds—will soon fall into negative territory and likely remain there for several years, and (b) it diminishes the long-term revenue forecast. The charts below illustrate these problems:



This situation demands a solution and justifies new, diversified approaches to funding infrastructure development as well as FAA operations in general. FAA funding, and in particular funding for NextGen, has been debated for years. Not only have we missed the opportunity to get ahead of this challenge, the Trust Fund is now experiencing pressure that, if allowed to continue, will delay the introduction of NextGen.

The Role of the General Fund Should Expand

As a preliminary matter, it should be an obvious fundamental principle that “public good” programs and functions carried out by the FAA to protect the public, such as safety regulation and oversight, are funded by the General Fund. The Trust Fund

should be reserved for its original intended purpose, to provide for the expansion and improvement of the Nation's airport and airway system.⁵ Adhering to this fundamental principle will relieve the Trust Fund of "mission creep" and ensure that the public fairly contributes to the cost the FAA incurs in overseeing the safest air transportation system in the world. The public derives tremendous value from FAA safety activities. It bears repeating here that U.S. commercial aviation ultimately drives more than \$1 trillion per year in U.S. economic activity and more than 10 million U.S. jobs.

Another appropriate role for the General Fund is to fund airport development projects at noncommercial public-use airports, instead of funding them with Trust Fund revenues through the Airport Improvement Program (AIP). Roughly \$1 billion of Trust Fund revenues are allocated through AIP annually to public-use airports that do not receive any commercial service. But, as discussed above, the users of those airports contribute very little to the Trust Fund. Thus, commercial aviation is unfairly subsidizing development projects at these airports and the effect is to drain the Trust Fund of badly needed revenues that could be used to pay for ATC services, the development of NextGen and critical infrastructure projects at key commercial airports. ATA does not oppose development at noncommercial public-use airports. Just like FAA safety regulation and enforcement, however, these projects are "public good" activities and should not be funded out of the Trust Fund. Instead, General Fund revenues should be substituted for the Trust Fund revenues that support these projects through AIP. This would help repair the health of the Trust Fund.

New Ideas for NextGen

The condition of the Trust Fund combined with the urgent need to implement NextGen makes the historical way of funding this project—on a cash-only basis by means of annual appropriations—impracticable. The present circumstances demand that we look at new ideas. In particular, *NowGen* should be supported by the General Fund.

First among these creative financing concepts is to give the FAA bonding authority. The benefit of bonding authority is that it would give the FAA a known and reliable funding stream without facing the vagaries of the annual appropriations process. In addition, FAA would be able to leverage this funding stream to enhance the capital available for NextGen.

Another concept is to make NextGen eligible for funding from a National Infrastructure Bank, as proposed by Congress and the President. Creating an independent national infrastructure bank with the power to issue the equivalent of municipal bonds would be instrumental in providing NextGen with a known, reliable funding source and would hasten NextGen's full deployment.

Changes for Airport Development Funding

Airports have been hampered in their efforts to issue bonds for development projects due to application of the AMT tax. This occurs because Federal tax law classifies most airport bonds as private activity bonds, even though they finance projects that realistically are public works projects. AMT application has two effects—the earnings on airport bonds are subject to AMT tax calculation, making them less attractive, and airport issuers are charged higher rates on their borrowing. Permanently eliminating this punitive tax on airport bonds would result in broader access to bond markets for critical infrastructure projects (the American Recovery and Reinvestment Act (ARRA) provided relief from the AMT for new private activity bonds issued in 2009 and 2010, as well as allowing the refinancing of current AMT bonds issued between December 31, 2003 and January 1, 2009). Particularly now, when the credit is difficult to obtain, Congress should do everything it can to free up the markets for development projects that will drive jobs and important public benefits.

If Congress passes legislation establishing a National Infrastructure Bank, then airport infrastructure projects that will increase capacity and improve safety should be made eligible for such funding.

⁵ "The principal purpose of this legislation is to provide for the expansion and improvement of the Nation's airport and airway system. In substantial part, this purpose is to be achieved through the imposition and application of airport and airway user charges." H.R. No. 91-601, reprinted in 1970 U.S.C.C.A.N. 3047.

A Forward-looking National Aviation Policy Will Enable the Industry to Meet the Many Challenges it Faces and Continue to Drive Economic Activity

A weak U.S. airline industry results in fewer jobs and reduced economic activity, not just for airlines, but across the broad supply chain—including manufacturers (airframe, engine and avionics), hotels and tourism, computer technology and services, maintenance providers, catering and cleaning services, insurance and financial services—that relies on a healthy aviation industry. Consequently, as the industry shrinks, it is unable to help lead the country out of the current economic downturn.

One important contributing factor to this situation is the absence of a clear and forward-looking national aviation policy that recognizes the economic and social importance of the airline industry. This is surprising, even shocking, given that U.S. commercial aviation ultimately drives more than \$1 trillion in U.S. economic activity annually and more than 10 million U.S. jobs. A national aviation policy would make a financially healthy airline industry a priority, encourage growth and competition by eliminating airspace and airport capacity constraints, and avoid single-interest and regressive policies that interfere with safe and rational business decisions—in other words, *do no harm*.

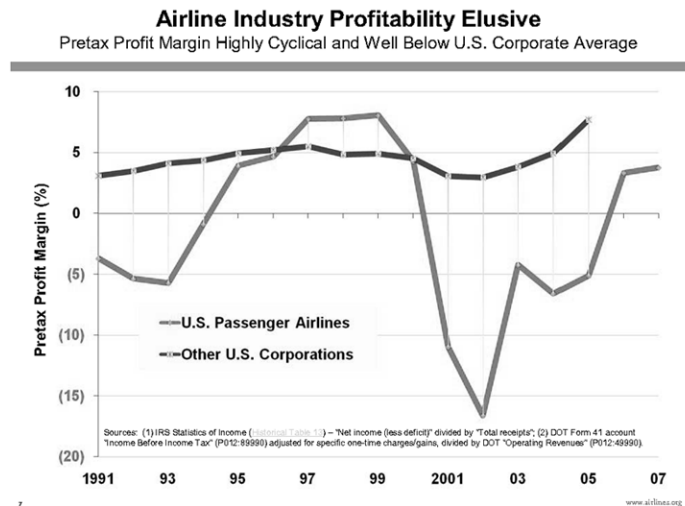
Financial health and stability are important for many reasons. Financial stability enables airlines to:

- *Address environmental concerns—invest in new aircraft and equipment.* To continue our decades-long track record of reducing emissions, airlines must have the financial capacity to acquire new aircraft, engines and ground service equipment. Until alternative fuels become commercially available to replace today's carbon-based fuels, the only way to reduce fuel consumption and emissions is by acquiring new and more efficient equipment. New aircraft also reduce noise and local environmental impacts.
- *Support the development and commercialization of alternative fuels.* Alternative fuels will not be developed and become commercially viable unless the airline industry provides a market for them. U.S. airlines are actively supporting the development of alternative jet fuels. That development will take years and the commercialization of alternative fuels will require significant investments in new infrastructure for their transportation, storage and delivery, in addition to the cost of acquiring the fuel itself.
- *Improve wages and benefits for employees.* The post-Sept. 11 period saw the industry lose tens of billions of dollars and the wages and benefits of employees—those who survived reductions in force—shrink. It is obvious that this trend can be reversed only if the financial health of the industry is restored. Without sustained profitability, wages and benefits stagnate and talented employees move on to other jobs in other industries.
- *Improve customer service.* Airlines need the ability to invest in staffing, training, systems and the equipment needed to improve customer service. New aircraft will increase reliability and further improve customer service. Equipping for NextGen, which will provide capacity and efficiency improvements, likewise will lead to higher levels of customer satisfaction.
- *Support U.S. security initiatives.* Many initiatives of the Transportation Security Administration and the Department of Homeland Security impose significant direct and ongoing costs on passenger and cargo airlines. The airlines must invest in personnel, equipment and computer systems to make these initiatives work to protect the public. The industry supports these initiatives but can do so only if they are financially sound.
- *Invest in safety.* “Safety first” is the bedrock principle of the airline industry. Operating with the highest degree of safety possible and complying with rigorous regulatory scheme of the FAA requires a significant ongoing investment in aircraft, maintenance, people, training, equipment, audit, quality-assurance and compliance systems. The airlines ongoing commitment to safety has resulted in an ever-improving and unparalleled safety record. The industry's commitment to safety means that it will never shortchange the needed investment to continue this remarkable track record.
- *Survive exogenous shocks.* The airline industry must be able to endure the exogenous shocks that regularly threaten its survival, from basic economic cycles to unprecedented energy prices to international wars to acts of terrorism. No other industry in America has been subjected to more challenges over the past quarter century, and without a doubt they will keep coming.

- *Attract investment.* Airlines are publicly-owned entities whose shareholders expect a return on their investment. If shareholders are continually disappointed, capital will dry up and the industry will shrink even further. Financial stability will attract the capital for the many needs discussed above.

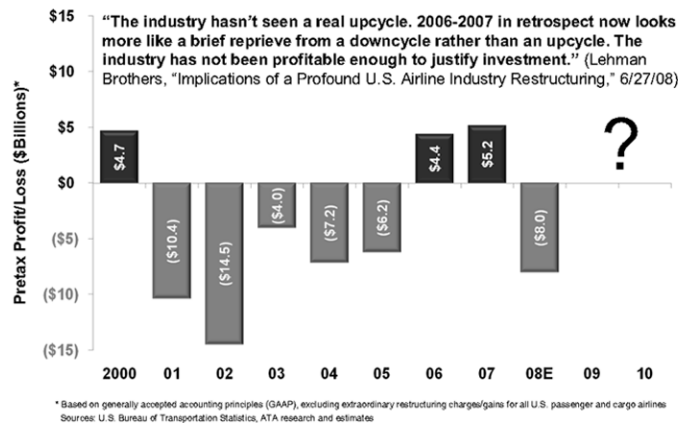
Do No Harm

The U.S. airline industry profit margin, when it has one, is razor thin. It compares unfavorably to most other U.S. industries. This is one reason why a national aviation policy must include a “do no harm” component.



U.S. airlines are in a precarious position. Losses have dogged the industry since 2001, with only a brief respite in 2006–2007. The U.S. airline industry lost an estimated \$8 billion in 2008, due largely to unprecedented oil and jet fuel prices.

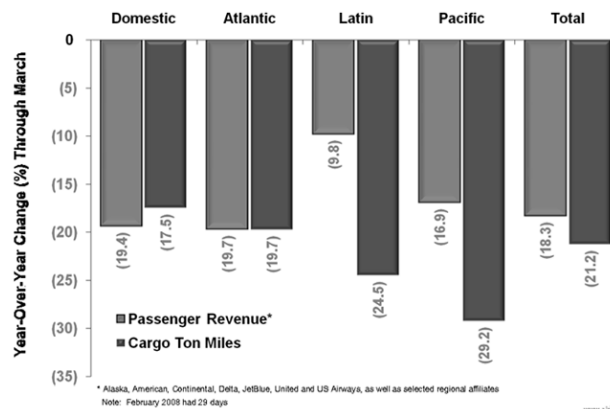
For U.S. Passenger Airlines, Losses and Earnings Volatility Have Been the Norm



This year, the current recession, and more recently the 2009 H1N1 virus (swine flu) pandemic, has further depressed demand for air travel, particularly valuable business travel. U.S. passenger airlines lost \$1.8 billion in the first quarter of 2009, producing an average *negative* 6.9 percent profit margin. One aviation research and consulting firm issued a report recently that concludes U.S. airlines will carry 41

million fewer passengers in 2009 than in 2008 and experience a revenue drop of \$7 billion in 2009 and \$9 billion in 2010.⁶

Demand for Air Travel and Air Cargo Down Sharply in 2009

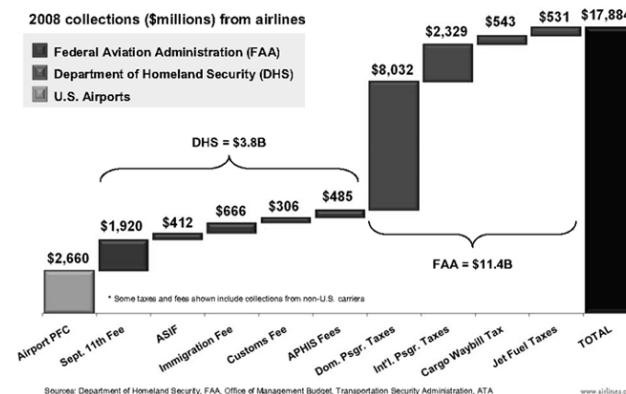


Put simply, the U.S. airline industry cannot afford regressive policies that inhibit best business practices and unnecessarily constrict management decision-making, or that add unnecessary fees and costs. Such policies undermine the ability of airlines to earn a profit, impair shareholder value and impair the ability of airlines to attract new capital and debt financing. That downward cycle prevents airlines from improving employee wages and benefits and from investing in equipment, facilities and new employees. For this reason, Congress should avoid the temptation to interfere with practices that have proven safety records and that satisfy legitimate business needs.

The numerous special taxes and fees that airlines and their customers pay contribute directly to the industry's poor financial performance. In 2008, airlines and their customers paid \$18 billion in special taxes and fees—before the usual Federal, state and local taxes. This unique burden creates a huge drag on industry profitability.

Airline/Customer "Special" Tax Burden is \$18 Billion per Year

In Addition to Typical Federal, State and Local Corporate Taxes (e.g., Income, Property, Sales)

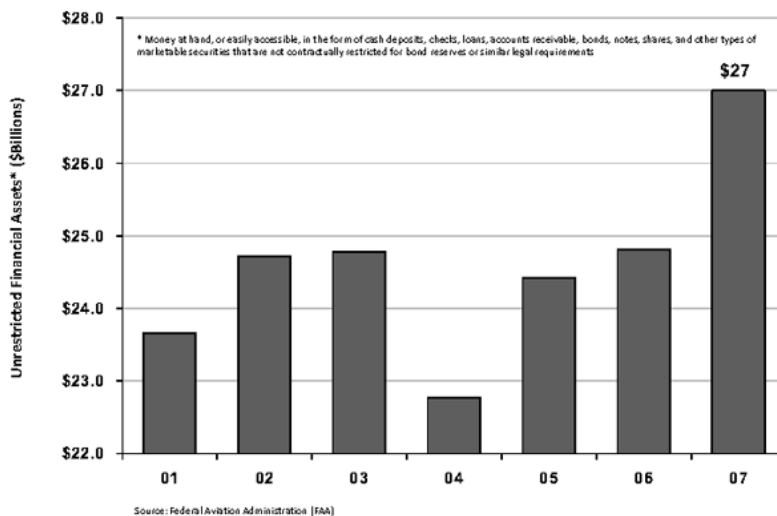


⁶Boyd Group International, *Airline Traffic: 2009 Prospects Going South*, February 2009.

Do No Harm—Do Not Increase Passenger Facility Charges

Under the heading of “Do No Harm,” passenger facility charges (PFCs) should not be increased from \$4.50 to \$7 per segment as advocated by the airport community. First, PFCs are a direct tax on passengers. Raising PFCs to \$7 would impose an *additional \$2 billion in taxes* on passengers, raising the cost of air travel and harming both passengers and airlines. PFCs, like any other tax, ultimately reduce consumption of the underlying product or service—in this case air transportation—thereby directly impacting airlines, too. Second, there is no evidence to suggest that necessary projects will go unfunded in the future without increasing PFCs. Indeed, PFCs reached record collections of more than \$2.8 billion in 2007. While 2008 collections decreased slightly (approximately \$2.7 billion), they still exceeded 2006 levels and FAA is currently estimating record collections for 2009. Third, virtually every PFC application has been approved since PFCs were enacted, so there should be no concern from airports on their ability to impose a PFC. Fourth, GAO reports that from 2001–2005 airports received an average of \$13 billion a year for planned capital projects from bonds, Federal grants and PFCs. This level of funding should be sufficient to meet current and future capital needs given the current economic conditions and reduced growth projections. If not, airports have accumulated more than \$27 billion in unrestricted assets, meaning discretionary funds are available to support necessary capital projects. Finally, although credit markets are tight, airports continue to maintain extremely high credit ratings and historically have had no trouble making successful bond offerings for critical, viable projects. In fact, several airports have recently issued bonds after a provision in the American Recovery and Reinvestment Act (ARRA) provided relief from the Alternative Minimum Tax (AMT) for new private activity bonds issued in 2009 and 2010 as well as allowing the refinancing of current AMT bonds issued between December 31, 2003 and January 1, 2009. While certain airports may be feeling pressure from credit markets, this temporary situation does not justify a permanent change in PFC funding, which will add billions of additional taxes. Instead, airports should revise their spending plans and Congress can consider other options such as permanently eliminating the AMT penalty, providing funds from the General Fund or establishing other innovative financing mechanisms, discussed previously.

Airports Have Accumulated Significant Unrestricted Financial Assets*
based on 521 U.S. Commercial Service Airports



Do No Harm—Maintain Antitrust Immunity Standards and Process

Closely integrated, immunized alliances provide a lawful means for U.S. airlines to achieve significant consumer benefits, optimizing the utilization of both U.S. and foreign carrier networks to mutual advantage. DOT has approved international air-

line alliances because they produce numerous and substantial benefits both to the public and the participating carriers. Public benefits include new online service and more frequent and convenient online service options, more connecting options across alliances and enhanced interalliance competition. More options and greater competition translates into more competitive fares for consumers. Carrier benefits include strengthened ability to compete, efficient use of assets and enhanced financial performance. The public will lose these important benefits if antitrust immunity is withdrawn—even temporarily—and carriers are forced to demonstrate that an alliance satisfies new and different standards.

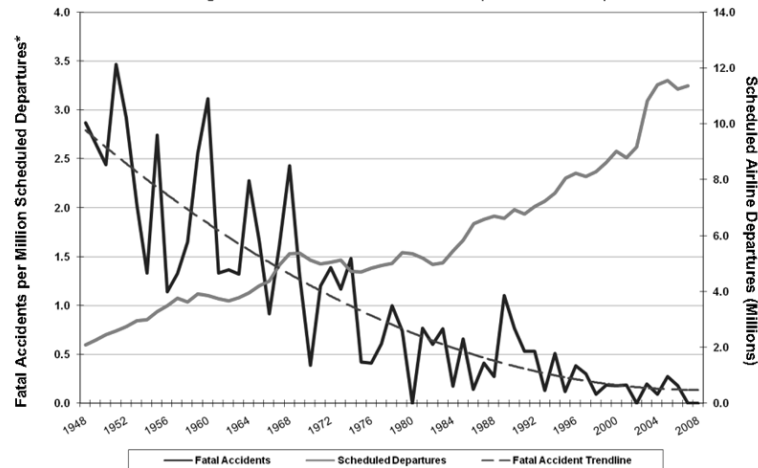
Terminating antitrust immunity, as H.R. 831 proposes, would have a harsh impact on airline employees, and cause a ripple effect across the travel and tourism industry at a time when U.S. unemployment is escalating rapidly. We estimate that terminating immunity for existing approved agreements and changing current practice would cost thousands of airline jobs. Parties to alliances and proposed alliances would not continue or go forward with such arrangements without antitrust immunity because they simply cannot incur the uncertainty and risk associated with a potential legal challenge after an alliance has begun operations. Changing antitrust immunity for alliances would suppress economic activity and counter other economic stimulus efforts.

Do No Harm—Foreign Repair Stations are Important and Safe

Safety is the top priority for U.S. airlines. In today's international markets—with U.S.-registered aircraft positioned throughout the world—the ability to outsource maintenance to qualified facilities outside of the U.S., particularly heavy maintenance, is essential and efficient. Also, for some aircraft, U.S. facilities do not have the capacity to meet demand. Even more important, it is safe and subject to full oversight by the FAA and reciprocal international safety regulatory authorities. These facilities unquestionably have the competence to perform maintenance on U.S.-registered aircraft that meet our demanding standards. Data compiled by the National Transportation Safety Board shows that as U.S. airlines increased contract maintenance work to vendors around the world, accidents with maintenance as a probable cause declined from 0.05 per 100,000 departures to absolute zero in recent years. The industry's safety record remains unmatched; no evidence indicates that offshore MRO services are unsafe or insecure.

With Each Decade, U.S. Airline Safety Has Improved

Since Deregulation, < 0.5 Fatal Accidents per Million Departures



* Scheduled passenger and cargo operations of U.S. air carriers operating under 14 CFR 121; NTSB accident rates exclude incidents resulting from illegal acts
Source: National Transportation Safety Board (NTSB)

International aviation maintenance is a global business, enabling more than 200,000 highly skilled jobs at U.S. MRO facilities performing maintenance on U.S.- and non-U.S.-registered aircraft, and sustaining thousands of domestic manufacturing jobs. Prohibitions and unnecessary barriers on maintenance outsourcing are not only unnecessary to sustain safety—they will mean U.S. job losses. This is not

idle speculation. Representatives from the European Union recently made it very clear to us and Federal officials that U.S. maintenance protectionism will provoke retaliation in Europe.

ATA supports FAA oversight of foreign repair station operations, but opposes calls for a moratorium or discriminatory regulations and oversight. In this case, evidence that maintenance performed at foreign repair stations is inferior or unsafe is lacking.

Other Do No Harm Issues

Several other items also fall under the “do no harm” heading. These include:

- *Slot Auctions.* Requiring airlines to forfeit slots and then allowing FAA or airports to auction them off does nothing to address congestion but will add costs that can force airlines to raise fares and discontinue service in smaller markets.
- *Congestion Pricing.* Allowing airports to impose additional costs during congested periods will add costs that can raise fares and force airlines to discontinue service to smaller markets. Both congestion pricing and slot auctions distract policymakers from the real problem: FAA’s failure to provide airspace capacity and to work with airports and airlines to develop capacity enhancements at specific locations.
- *Grandfathered Revenue Diversion.* Federal law allows a few airports to divert revenue to local or state governments, so-called grandfathered revenue diversion. These exceptions to the principle of plowing airport revenues back into maintaining and growing airports so they are self-sufficient are decades old and it is questionable if they continue to serve a legitimate purpose. Airlines must make up these revenues at these airports so their costs increase unnecessarily. These exceptions should be eliminated.
- *Airport Firefighter Stations.* FAA regulations have safely dictated staffing and equipment requirements for airport fire stations for years based on the needs within the airport boundary. Increasing staffing and equipment based on surrounding populations will not enhance airport safety but will increase costs unnecessarily. These are not legitimate safety claims and should be rejected.

This FAA reauthorization legislative process offers a rare opportunity for Congress to make aviation a priority by establishing a strong, forward-looking national aviation policy. It should take advantage of this opportunity.

Customer Service—Improvements Are Continuing Without Legislation

We said in 2007 that customer service legislation is not needed for several reasons, including marketplace competition for customers, the airlines’ own self-interest in earning repeat business, public attention to this issue and regulatory oversight and enforcement by the Department of Transportation (DOT).⁷ We stated that customer service in general would improve over time, and that airlines would learn from the unusual and extreme events of December 2006 and February 2007, in how to better handle lengthy delay situations and improve the decision process to cancel flights. We were right then and we remain firm in our conviction that legislation is not needed.

Recent DOT data show that customer service has improved . . .

⁷See: Statement of James C. May, President and CEO of the Air Transport Association of America before the Senate Committee on Commerce, Science, and Transportation, April 11, 2007, on Airline Service Improvements.

DOT Airline Customer Service Metrics

	<u>2000</u>	<u>2007</u>	<u>2008</u>	<u>1Q09</u>
Flight Cancellations (as % of sched. domestic departures)	3.30	2.16	1.96	1.91
Taxi-Out* Times > Three Hours (per 10,000 domestic departures)	2.92	2.15	1.76	1.22
On-Time Arrival Rate (% of domestic flights within 00:15)	72.6	73.4	76.0	78.4
Involuntary Denied Boardings (per 10,000 domestic passengers)	1.04	1.12	1.10	1.31
Mishandled Bags (per 1,000 domestic passengers)	5.29	7.05	5.26	4.29
Customer Complaints (per 100,000 domestic passengers)	2.98	1.38	1.13	1.03

*Time elapsed between departure from the origin airport gate and wheels off
 Sources: Bureau of Transportation Statistics and DOT Air Travel Consumer Report

www.ata.org

. . . and that extended delays are down.

Taxi-Out Delays Have Decreased

Taxi-Out Delays (per 10,000 departures)		
	2 hrs and/or more	3 hrs and/or more
2007	11.88	2.15
2008	10.20	1.76
Jan-Feb 2009	7.04	1.03

In addition, the most recent DOT Consumer Report⁸ shows that lengthy tarmac delays remain extremely rare:

- A total of 21 flights out of 557,442 scheduled flights in March 2009 (0.0038 percent) had tarmac delays of 4 hours or more; 88 had delays of 3 hours or more (0.0158 percent).
- Of the 21 flights delayed 4 hours or more, 18 occurred on March 1 due to an unusual weather event, and the remaining 3 occurred on March 29.

ATA member airlines have been very active in addressing the issues associated with lengthy tarmac delays since the winter of 2006–2007. For example, the Congressional hearings in April 2007 revealed gaps in the delay data collected by BTS, particularly with respect to canceled and diverted flights. ATA and its members supported changes to the reporting system to capture this data and worked with DOT and BTS to update the reporting system. Carriers began reporting this new data in October 2008.

ATA and its members also participated in the National Task Force to Develop Model Contingency Plans to Deal with Lengthy Airline On-Board Ground Delays (Task Force) established by former DOT Secretary Peters in early 2008. The Task Force addressed contingency planning for both airports and airlines, and produced an extensive document capturing numerous issues that contingency plans should address, and best practices to deal with them. It was a highly successful exercise that

⁸ Issued May 2009.

enabled airlines and airports to review and update their internal contingency plans on an ongoing basis as the Task Force worked on these issues.

In November 2007, DOT initiated a rulemaking process to expand its consumer protection regulations for airline passengers. ATA and its members have actively participated in this rulemaking and, in fact, have supported several DOT proposals. While we disagree with certain proposals having to do with incorporating contingency plans and related items into airline contracts of carriage, when finalized, the rule will enable consumers to obtain more relevant information and provide additional protections to passengers when things go wrong despite the best efforts of airlines.

Beyond the regulatory front, innovation and competition continue to drive airlines to improve the passenger experience. Online and kiosk applications to obtain boarding passes are no longer novel—they are considered *de rigueur*. Airlines are now experimenting with electronic boarding passes so that cell phones and personal digital assistants (PDAs) can be used, thereby eliminating paper boarding passes entirely. And *a la carte* pricing for services not every passenger needs or wants is helping to offset upward pressure on base fares. These innovations have become a point of competition, which is exactly what Congress looked for—innovation and competition—when it passed the *Airline Deregulation Act*.

For all of these reasons, we do not think consumer protection legislation is needed. In particular, we oppose a hard and fast rule requiring airlines to give passengers the option to deplane after 3 hours. Mandatory deplaning will have numerous unintended consequences that, ultimately, will create even more inconvenience for passengers and lead to even more flight cancellations. Forcing airplanes to return to the gate or get out of line to deplane a passenger to a ground vehicle on an active taxiway will be highly disruptive to airport and airline operations and raises significant safety issues.

As we noted in prior testimony,⁹ if a flight returns to a gate and is canceled, then the passengers will very likely be delayed at least into the next day, if not longer. Even if a flight is not canceled, planes will lose their place in line to depart by being forced to go back to the terminal or pull out of line to deplane passengers by air stairs. This will cause even longer delays for everyone else. Consequences that will occur, particularly from a return to the gate to deplane a passenger, include:

- Cancellations because crews “time out”¹⁰
- Flights delayed because they lose their place in the departure line
- Unplanned overnight stays for unaccompanied minors
- Mishandled baggage
- Missed meetings and vacations
- Cascading cancellations and delays caused by planes and crews out of position, especially when diversions are involved
- An overall increase in cancellations because airlines will pre-cancel flights to limit passenger inconvenience and operational complications caused by the bill’s requirements

These consequences are likely to be exacerbated for flights diverted to alternate airports.

The impact of flight cancellations extends beyond the passengers on the canceled flight. Operationally, the consequences for airlines and *the next day’s passengers* include:

- Crews and aircraft are ‘out of position’ and the next day’s schedule is compromised
- Passengers at the destination city must wait for the aircraft to arrive the following day, delaying or canceling *their* departures
- Flight crews ‘deadheading’ on the canceled flight will not reach their destinations and will not be available to operate their scheduled flights

⁹ See footnote 7 above.

¹⁰ FAA regulations on duty limits and rest requirements for pilots and flight attendants, as well as carrier collective bargaining agreements that go beyond the regulations, limit the amount of time pilots and flight attendants may be on duty without a rest break. Limited provisions that allow the duty day to be extended because of reasons beyond the control of the airline assist in dealing with weather-related delays. However, the utility of these provisions will be curtailed significantly by forcing planes back to the gate to deplane passengers.

- Aircraft will be forced to traverse congested runways/taxiways when logistically possible (as it was not for long periods at JFK during the storm gridlock) to return to the terminal

Based on objective metrics, customer service is improving and airlines are doing a better job of responding to lengthy tarmac delays. Competition, regulatory oversight and enforcement, and public scrutiny are working. On the other hand, proposed legislation will be disruptive and add unnecessary costs. We continue to believe that additional legislation is not necessary.

Conclusion

It is imperative that Congress enable FAA to move forward promptly with its NextGen program and authorize its acceleration through *NowGen*. The environmental, capacity and efficiency benefits of NextGen are critical to meeting the needs of the flying and shipping public and improving the financial condition of the U.S. airline industry. FAA reauthorization legislation should embrace new thinking and new ideas about infrastructure funding, especially in light of current economic conditions and the need for FAA to be able to plan its research, development and acquisitions over several years. The principle of fair and equitable funding of the ATC system and the AIP program should be imbedded in reauthorization legislation. What user groups pay for ATC services should be aligned with their consumption of those services—airlines should not subsidize other users. Likewise, AIP funding for development projects at noncommercial public use airports should not come solely from the taxes and fees that commercial airlines pay into the Trust Fund. In addition, we urge Congress to adopt a forward-looking national aviation policy that recognizes the commercial airline industry's value and importance to our economy and society. Finally, customer service legislation is not needed. The industry has done a good job of responding to issues related to long tarmac delays and, on an objective basis, is providing better customer service.

Senator DORGAN. Mr. May, thank you very much.

And finally on this panel, we will hear from Mr. Ed Bolen, President and Chief Executive Officer of the National Business Aviation Association.

Mr. Bolen.

STATEMENT OF ED BOLEN, PRESIDENT AND CEO, NATIONAL BUSINESS AVIATION ASSOCIATION

Mr. BOLEN. Thank you, Mr. Chairman, and thanks to the leadership of this Committee for making this hearing a reality today.

The National Business Aviation Association is unlike most associations because most associations represent companies at their core business. NBAA represents 8,000 diverse companies, non-profits, state government organizations, and other non-profits, all who have one thing in common. They rely on the use of their general aviation airplane to meet at least some portion of their transportation challenges.

As everyone on this subcommittee knows, business aviation is an FAA-defined term. According to the FAA, business aviation is the use of any general aviation aircraft—piston, turboprop or turboprop—for a business purpose.

Business aviation in the United States is represented by 85 percent of small and mid-sized companies and surveys show that the senior executive is onboard the plane about 15 percent of the time.

Business aviation is used by companies to do things like visit multiple destinations in a single day, move teams of employees to locations with little or no commercial airline service, transport products that are too big to fit in the overhead bin and too sensitive to fit in the cargo hold, and they move teams of people that need to discuss proprietary business en route.

Today, business aviation is fundamental to our Nation's economy and our air transportation system, and when I use the term "business aviation," I hope everyone recognizes that "business aviation" and "general aviation" are terms that are sometimes used interchangeably and I will do so today.

General aviation in the United States is essential because general aviation means jobs, 1.2 million manufacturing and service jobs. Business aviation is important in the United States because it provides a lifeline to communities all across America with little or no commercial airline service.

Business aviation is important to America because it allows companies to be productive and efficient and business aviation is important because it provides humanitarian relief every day in the United States, and Mr. Chairman, you know this. When we had floods in North Dakota a couple of weeks ago, companies were giving their airplanes to try to assist in that and they do that every day—flying vital organs, flying cancer patients to treatment, trying to move combat veterans with their families. It's a fundamental part of our air transportation system.

Now, today the general aviation industry is hurting, hurting in ways that it has not hurt for decades. In March, business jet flights fell by 30 percent compared to the same time last year. Charter operations are down by 40 percent. The inventory of used airplanes is at an all-time high and prices for airplanes have declined by 40 percent in the last year. Every major manufacturer has laid off a significant portion of their workforce. So have FBOs, charter companies and everyone else associated with the industry.

Production lines have slowed and in some cases they've stopped. A couple of very high-profile manufacturers have declared Chapter 7 and liquidated. So make no mistake about it. These are very difficult times for the general aviation industry, but we're a resilient bunch.

Many of the leading general aviation companies have been around since before the Great Depression. So as difficult as today is, our eye is still on the future and we intend to be every bit as important to our Nation's economy and air transportation system in the future as we have been to its past and it's that reason that I want to come before you today to say that the general aviation community is squarely behind NextGen.

As you know, we were the organization and the community that stepped up to funding NextGen when we discussed this last year and we are not stepping back from that commitment today.

The general aviation community believes the benefits of NextGen are primarily safety by improving situational awareness, they are expanding the capacity of the system by allowing more precise spacing, and they are important for the environmental reasons, by allowing more direct routing.

So we believe in NextGen and we intend to support you and be your partner as we try to make this a reality today. We look forward to working with you on all the funding issues. We look forward to working with you on the technical issues. We look forward to being your partner in making sure that the United States has tomorrow what it has always had in the past and that is the larg-

est, the safest, the most diverse, and the most efficient air transportation system in the world.

[The prepared statement of Mr. Bolen follows:]

PREPARED STATEMENT OF ED BOLEN, PRESIDENT AND CEO,
NATIONAL BUSINESS AVIATION ASSOCIATION

Mr. Chairman and members of the Subcommittee, my name is Ed Bolen, and I am the President and CEO of the National Business Aviation Association. I am grateful for the opportunity to appear before you today.

NBAA commends Chairmen Rockefeller and Dorgan and Ranking Members Hutchison and DeMint for the Committee's work on aviation system modernization and for holding this important hearing to discuss the future of our national air transportation system and reauthorization of FAA.

We strongly support your work to improve our Nation's aviation system, which will also significantly contribute to economic growth and job creation. In these challenging economic times, the importance of a robust transportation system cannot be overemphasized.

NBAA was founded 62 years ago. Today, we represent a diverse group of approximately 8,000 businesses, government agencies, universities, non-profits, and other organizations from all across America who have only one thing in common: they depend upon general aviation aircraft to help them meet some of their most difficult transportation challenges.

NBAA and our Members are committed to working with Congress to transform and modernize the Nation's aviation system. Likewise, we are committed to modernization policies that support the continued growth of each aviation segment, including general aviation, which plays a critical role in driving economic growth, jobs and investment across the U.S. We strongly support the shared goal of keeping our national aviation system the largest, safest, most diverse, and most efficient air transportation system in the world.

What is Business Aviation?

Business aviation, as members of the Subcommittee well know, is an FAA-defined term. According to the FAA, business aviation is the use of any general aviation aircraft—piston or turbine—for a business purpose.

Eighty-five percent of the companies that utilize business aviation in the United States are small or mid-size. And surveys show that the senior executive is only on board the airplane about 15 percent of the flights.

Business aviation is used by companies to do things like visit multiple destinations in a single day; move teams of employees to locations with little or no commercial airline service; transport products that are too big to fit in an overhead bin and too sensitive to be checked; discuss proprietary information en route without fear of eavesdropping; stay connected with the home office as they manage a difficult situation; or to stay flexible enough to respond to changing circumstances.

Let me illustrate this point with two examples:

- First, consider MacNeil Automotive, which produces rubber floor mats for cars from a factory in Illinois. The company relies on its two business aircraft—a Beech Bonanza G36 and a Cessna Citation to transport measuring instruments that are too delicate to be shipped to auto manufacturers, and won't fit in an airliner's overhead compartment. They literally cannot conduct business without their airplanes.
- Similarly, Luck Stone—a family-owned supplier of stone construction products for homes in Manakin, Virginia—must have its King Air turboprop to efficiently manage its 16 sites located across the Southeastern U.S.

Why is Business Aviation Essential to our Economy and Transportation System?

Because Business Aviation means jobs—good jobs—more than 1.2 million manufacturing and service jobs in the United States. It is part of a general aviation industry that contributes more than \$150 billion to our economy each year and contributes positively to our Nation's balance of trade.

There are more than 5,000 public use airports in the United States—fewer than 500 have commercial airline service—making business aviation an economic lifeline for thousands of communities. Business Aviation serves also as a lifeline to communities with declining airline service. Last year, over 100 communities in the United States lost some or all scheduled airline service.

Business Aviation helps businesses of all sizes be efficient and productive.

And, business aviation helps us respond to emergencies and provide humanitarian relief.

For example, in the days and weeks following Hurricane Katrina, hundreds of thousands of pounds of supplies were transported into small airports throughout the Gulf Coast region aboard business aircraft. These aircraft also were used to transport victims out of harm's way.

More recently, general aviation has snapped into action when there's a need to confront floods in the Midwest, fires in the West, or a whole host of other natural disasters.

The business aviation community—working mostly on a volunteer basis—has been quick to help assess damage, rescue those affected by these disasters, and carry in lifesaving support and supplies to the affected regions.

The people who rely on a general aviation aircraft for business are also dedicated to helping provide lifesaving flights to the communities in which they live and work.

Operations like the Corporate Angel Network arrange free air transportation for cancer patients traveling to treatment using the empty seats aboard business airplanes. They have arranged more than 20,000 lifesaving flights since their founding in 1981. Angel Flight, America's seven member organizations and 7,200 volunteer pilots arranged more than 18,000 flights in 2005 alone to carry patients to medical facilities.

Veterans Airlift Command uses business airplanes and unused hours of fractional aircraft ownership programs to provide free flights for medical and other purposes for wounded service members, veterans and their families. Veterans Airlift finds volunteers in the business aviation community to fly missions on request and contribute the full cost of their aircraft and fuel for the missions flown.

State of the Industry

Today, Business Aviation, indeed the entire general aviation industry, is hurting—hurting to a degree we have not experienced for decades.

- In March, business jet flights fell by 30 percent compared to the same time last year.
- Charter operations are down 40 percent.
- The inventory of used airplanes continues to rise to historic levels and prices for used airplanes have declined by 40 percent.
- Every manufacturer has been forced to lay off a significant portion of its workforce. So have FBOs, charter operators, and flight departments.
- Production lines have slowed, and in some cases stopped.
- New airplane programs have been canceled.
- A couple of high-profile airplane companies have been forced to liquidate.

Make no mistake about it, these are very difficult times. And projections are that things will get worse in 2010. But people in the general aviation community are a resilient bunch. Keep in mind that some of the leading general aviation companies in the United States survived the Great Depression.

At NBAA, we believe that general aviation will be every bit as fundamental to America's future as it has been to its past. And, we are prepared to work with the Senate to start building that future today.

FAA Reauthorization

Clearly, much has changed for the industry I represent in the two years since I last testified before this Subcommittee on FAA reauthorization.

However, in spite of all the challenges faced by the business aviation community, one thing has remained constant—our continued support for comprehensive FAA reauthorization legislation and modernization of the Nation's air traffic control system.

We commend the Subcommittee for conducting a thorough examination of all of the issues during the 110th Congress, which ultimately resulted in the compromise legislation that went to the Senate floor.

That legislation provided multi-year funding for enhanced investment in FAA programs to modernize and expand the Nation's air transportation system, and clearly reflected the commitment of the general aviation community to that goal. We supported the legislation then, and we continue to support it today.

Our support for FAA Reauthorization reflects general aviation's commitment to NextGen.

As this Subcommittee knows, NextGen is about technologies, policies and procedures that can expand system capacity, enhance safety, and reduce our environ-

mental footprint by allowing more precise sequencing and spacing, improving situational awareness, and providing more direct routings.

Accelerating the transition to the Next Generation Air Transportation system should be a national priority.

For years, general aviation has been at forefront of our Nation's modernization effort. We were early adopters of GPS navigation systems. We equipped to make Domestic Reduced Vertical Separation Minima a reality.

And for more than a decade, we have enthusiastically supported the development of the ADS-B test program in Alaska—a test program that is now the cornerstone technology of the modernization effort.

You can expect us to continue to be partners in NextGen as we deploy necessary ground stations, produce more RNAV/RNP routes, certify ADS-B, and find ways to collectively solve the challenging equipage issue.

Conclusion

Despite the current economic challenges facing the industry, we remain committed to NextGen.

Aviation plays a critical role in driving economic growth and investment across the country. Our air transportation system is critical to the Nation's economy.

We are committed to working with the Congress to complete an FAA Reauthorization bill that achieves our shared goal of keeping the U.S. aviation system the safest, largest and most efficient in the world.

NBAA and our Member companies across the Nation look forward to working with this Subcommittee to accomplish this vital national objective.

Senator DORGAN. Mr. Bolen, thank you very much for your testimony. We appreciate the testimony of the entire panel.

I want to ask a couple of questions, but first let me ask Ms. Blakey. You're formerly the head of the FAA, the FAA Administrator.

When I began today, I talked about the tragic accident in Buffalo and described what we now learn that someone in the cockpit is making \$16,000 a year, who flew all night before because they have a duty station on the East Coast and live on the West Coast and have to have a second job, live at home, I mean, and apparently, according to the cockpit recordings doesn't know much about icing and hasn't flown in icing.

Are you surprised by that? I mean, I gotta tell you, I was really, really troubled by what we've learned about the experience and the circumstances of those in the cockpit. We've got a lot of great people flying airplanes around this country. A lot of them. I don't want to tarnish in any way the reputation of those that climb in the cockpit and fly commercial airplanes, but I was stunned to read the circumstances of that cockpit. Were you?

Ms. BLAKEY. Yes, Mr. Chairman, I was. I will have to tell you that whenever something like this comes to light, I think it shakes all of us a bit because when you realize that every day phenomenal crews fly in the system and they do a wonderful job and they do have very, very effective safety oversight 99.9 percent of the time, when something like this happens, it does shake you.

I'm also the former Chairman of the NTSB investigating accidents. So one of the things I would put forward is the importance of the investigative process and the hearings to bring to light all of the facts and then make solid recommendations.

I have a great deal of confidence in that process and don't want to second-guess what actually has transpired until they are able to complete that.

Senator DORGAN. Well, I was only responding to what's now in the public record.

Ms. BLAKEY. I understand.

Senator DORGAN. But as I said earlier, we're going to hold a hearing on safety, I want to do that very soon, which will include some of these issues.

Mr. Bolen, over the past 30 years we've asked everybody out there flying an airplane to put a transponder on it. You know, the fact is most all of them did it. I suppose there are a few planes out there sitting in hangars out on a farm some place that don't have a transponder. Almost everybody out there's flying with a transponder.

How difficult will it be to equip most of our general aviation airplanes, I think most commercial airplanes already have a GPS system, but how difficult will it be to equip general aviation with GPS capability?

Mr. BOLEN. Well, I think the equipage issue is a huge issue that's on the table. Now historically in the United States, we have handled equipage issues in a couple of different ways.

With the transponders, the way we encouraged equipment was we provided a certain amount of air space and said to enter this air space you need to be equipped. If you are not equipped, you can't enter that air space and that was certainly one way to do it.

We had a similar approach with domestic vertical separation minima where we said that if you are interested in flying between 29,000 feet and 41,000 feet, you'll invest in altimetry and the community has largely made that decision.

I believe that the equipage issue that is before us, we could handle the way we have with ADS-B technology in Alaska which is largely to have the government pay for it and provide it so that the entire country can enjoy the benefits of that. We could do that through tax credits. We could do it through other means.

I think everyone in the community has said we'd like to see equipage addressed. We'd like to see it done primarily through the General Fund. I think in order to make that happen, we would like to see standards that are set and clear.

Senator DORGAN. Mr. May, —

Mr. BOLEN. And I also think we need to do that over a multi-year period where we set out precisely what the schedule's going to be.

Senator DORGAN. Mr. May, I'm going to ask Mr. Barclay about EAS in a moment, but, first, if I might ask you. Mr. Barclay talked about indexing the PFCs. PFCs have been flat for some while. What's your response to that?

Mr. MAY. Mr. Chairman, my response is that we're in economic crisis. This is the last time we need to increase the levels —

Senator DORGAN. If we weren't in a crisis, what would your response be?

Mr. MAY. The same, because —

Senator DORGAN. It's not about a crisis then?

Mr. MAY. — I don't think — I don't think the commercial aviation sector and its passengers ought to be the ATM for the rest of the industry.

Senator DORGAN. So it's not about a crisis, though?

Mr. MAY. It has more impact in a crisis because it ultimately goes as an increase in pricing.

Senator DORGAN. I understand. Mr. Barclay, Essential Air Service. We have an Essential Air Service Program. You know, there's some controversy with respect to some areas where you have very few people getting on an airplane, very little effort in the community to maximize the use of that service.

Are there some things that you would recommend with respect to the EAS Program on behalf of the airports?

Mr. BARCLAY. Well, we've recommended the increased funding that Congress has consistently brought to the program after—and this has been true of Administrations for years—recommended under-funding, but we do think or I think that this needs a whole new look.

You've got about 550 airports in the country that get some kind of scheduled air service, 150 of those have 90 percent of the passengers. So those top hunk, the largest 150, are always going to get pretty good service delivered by the marketplace. They're going to be market-driven and wind up getting air service that is appropriate to that market.

The other 400 are often—it's a case of geography whether they're going to get good service into that market-driven system. They are the rural and smaller points that don't have as much market power to connect up properly to that system and it's not just an EAS issue. It's a broader issue of are the transportation needs of the country being delivered by that system overall and they're going to be delivered where most of the passengers are, but I do think there's a broader issue to look at.

Senator DORGAN. Obviously, I'm a strong supporter of the Essential Air Service Program. The question is about improvements.

My time has expired, but I want to say to Mr. May, before I call on Senator DeMint, while we won't be dealing with it in this bill, you and your organization's support, trying to do something about this unbelievable and unbridled speculation in the price of oil going to \$147 a barrel, and what it did to jet fuel and so on and the imposition of significant difficulties for the country. I thought your organization did a great job working with us on those issues.

We haven't yet done the things that will prevent it from ever happening again, but we need to—

Mr. MAY. Mr. Chairman, through your leadership and that of Senator Cantwell and others, we've made a big dent in the education gap on that issue. We saw oil today and yesterday jump back up above \$60. There is widespread speculation, pun intended, that some market manipulation is starting to creep back into the system and we are wholeheartedly in support of your efforts to try and bring it under control.

Senator DORGAN. Thank you. Senator DeMint.

Senator DEMINT. Thank you, Mr. Chairman. I appreciate the testimony. It seems that we're in rare agreement here as a committee and everyone who has been in front of us that we need to move ahead with NextGen as quickly as we can.

Mr. May, you particularly talked about the need to fund it and make it happen. How do you think we can fund it? What are your thoughts?

Mr. MAY. Mr. Chairman, Senator DeMint, the first part of the answer is I wouldn't rely on the Aviation Trust Fund to be able to

do it. So if that is ruled out, then I think it's imperative that the Congress, working with the Administration, look at any of a number of solutions, some of which could be done in tandem. A national infrastructure bank, greater contributions directly from the General Fund, some kind of tax credit bonding.

I think there are a number of innovative financing solutions that could be used, reprogramming some of the stimulus money to this effect, but it's going to take some careful thought, and I think we are absolutely convinced and have indicated as much to the DOT and the Administration, that if we can find a way to have an additional \$6 billion to \$7 billion investment over the next few years, we can jumpstart this process under the leadership of FAA Administrator Babbitt and get the job done well before 2013 or 2014 as opposed to letting it stretch out to 2025.

Senator DEMINT. One of you mentioned the creative revenue sources. Should we avoid any kind of usage tax or tax on gas? Should we try to pay for it within the system or do you want all to come from the outside? Is there room for the system itself to help fund this thing?

Mr. MAY. Senator, we contribute about 90 percent of the dollars going—tax dollars going into the Trust Fund today. I don't expect that to go down any. We have a longstanding position that suggests there ought to be better equity in the funding of the Aviation Trust Fund, but there are just so many battles you're going to be able to take on and I would recommend to this committee that they look for alternative ways to fund it, other than through the Trust Fund.

There are lots of challenges that the Trust Fund itself is going to have to meet going forward. So I'd like to see the funding come elsewhere, from elsewhere.

Senator DEMINT. Ms. Blakey, you expressed some reservations in how the legislation was constructed at this point. What are those more specifically, as much as you can talk about it in a couple of minutes?

Ms. BLAKEY. Well, what I was reflecting today was the House bill has provisions that require the FAA to inspect foreign repair stations on a twice-annual basis. We are very concerned about that because we do believe it will have very negative repercussions on our safety and other bilateral agreements that we have that are of longstanding and we also have great concerns that, in fact, it will strap the FAA's resources.

We should be looking at this as a risk-based system and inspecting where the needs are the greatest and that should be the principal, not an arbitrary measure like I just outlined.

Senator DEMINT. Well, I'm glad you brought that up. The data I've seen suggest that if there's any advantage to safety, it would go to the foreign repair services at this point, and it would seem that that is a tangential issue that does not relate to the goals of the safety we're talking about or efficiency. I have the same concern that we don't alienate our European partners in any way when we have good evidence that we've got a pretty good relationship now. So I'm glad you brought that up.

Is that primarily the concern from the House side?

Ms. BLAKEY. I think, given the time constraints, but I'd be also happy to send you a note about a few other concerns.

Senator DEMINT. Anything, I would appreciate that very much.

Ms. BLAKEY. Certainly.

Senator DEMINT. Thank you, Mr. Chairman. I yield back.

Senator DORGAN. Senator DeMint, thank you very much. Senator Johanns has left.

Senator Warner.

**STATEMENT OF HON. MARK WARNER,
U.S. SENATOR FROM VIRGINIA**

Senator WARNER. Thank you, Mr. Chairman, and thank you and the members who serve on this Committee.

For some time, as I have indicated in my opening comment, I'm not new to these issues, and I want to follow up on some of Senator DeMint's comments about the sense that there's agreement around NextGen, clearly this panel has all testified to that.

I do get reluctant at times when everybody says we all want it but we don't want to pay for it. How our country, which has always led in this area, it appears to me, again from minimal knowledge, that I have some of the things I learned during the campaign about how sorry our current system and antiquated it is, how are other countries doing it?

I think Chairman Rockefeller at one point in one comment said that even Mongolia is moving toward a GPS-based system and moving forward and that we are lagging behind most other industrialized countries and obviously if Mongolia is stepping ahead of us, not just First World but Second and Third World countries.

You know, why don't we—the talk is good, but why have we not found the will to get that solution set in and how have other countries figured this out in a more effective or efficient way? And again, apologies, I know this issue has probably been debated through many, many times. So a neophyte question.

Mr. MAY. I don't think it's neophyte at all, and I think it's critical to understanding that we have had, whether it's a moribund bureaucracy or whether it's a lack of funding or whether it's fights over different pieces of technology, the reality is that we have fallen behind so many other countries.

The system that is being deployed across the European Union, SESAR, is, in my opinion, ahead of where we are. You are correct that there are places, like Tibet, Mongolia and elsewhere, that are very challenging flying environments that are deploying these technologies far faster than we are.

But I think the real lesson is not as much to look back as it is to look forward, make this a national priority. President Eisenhower in 1956 made infrastructure of our Nation's highways the Number 1 priority. I think it's time for this Congress and the Administration to establish the same kind of priority for aviation infrastructure, to put the funding behind it.

We know the technologies are proven. We know they are available. We know that organizations that range from GAMA on my left to AOPA to the airports to AIA, from the manufacturing side, as well,—

Senator WARNER. Are you saying—let me just make—

Mr. MAY.—are all in unison together.

Senator WARNER. I'd like to hear other comments, but are you saying that other countries have—are funding these from alternative revenue streams?

Mr. MAY. Yes.

Senator WARNER. Non-aviation-related revenue streams?

Mr. MAY. Yes.

Senator WARNER. Ms. Blakey?

Ms. BLAKEY. The EU is investing very heavily in SESAR, their system that is the parallel system to NextGen. So I would certainly point that out, and I think it is important to note that up to this point, we have been the gold standard, no question about it, in terms of technology and we do risk losing that in our development if we don't move ahead smartly because it's not just the question of the technologies themselves.

We need to set the standards and we need to start deploying. All of this gives the United States still the advantage that we have maintained throughout aviation's history. They are different systems.

I might debate my colleague here a bit about which one is ahead right now because they are being deployed on a very different basis. That said, there is no question we are in jeopardy unless we move ahead now with the funding support.

Senator WARNER. Mr. Bolen?

Mr. BOLEN. Yes, just following up on that, I think that the United States clearly has the largest, the safest, the most diverse and efficient air transportation system in the world.

The question on the future, I think there are areas, like Tibet, or Mongolia, that really didn't have a system in place. They've looked at some of the NextGen technologies, strictly some that we have demonstrated in Alaska, for well over a decade and said that's where the future is, let's put them into place, and they have had government support.

I think what you see in the United States is a system that has built up over a long period of time. We're not going to turn it off one day and turn on a new system. We're going to need to evolve to it and I think we need to make a commitment to it, and I would just go back and say that the general aviation community has stepped forward and said this is so important, we will put additional revenues behind it.

Senator WARNER. My concern is, though, that not only some of the stories I've heard of the aging nature of our system combined with an aging population of our air traffic controllers and the need to get more folks in to the appropriate modern training as air traffic controllers, is I don't think this is a, as a well-informed citizen, I don't think I fully appreciated, potentially, what jeopardy we are placing all of our flying public in if we don't act aggressively, whether you're a carrier's traffic or whether you're general aviation.

Thank you, Mr. Chairman. I look forward to working with you on this issue.

Senator DORGAN. Senator Warner, thank you very much. Senator Pryor.

**STATEMENT OF HON. MARK PRYOR,
U.S. SENATOR FROM ARKANSAS**

Senator PRYOR. Thank you, Mr. Chairman. If I may start with you, Mr. Bolen, let me ask about the Large Aircraft Security Program and wondering if you have an update on that for the Subcommittee.

Among other things, I want to know if the TSA seems to be listening to your concerns.

Mr. BOLEN. Well, thank you, Senator. As you know, the general aviation community has a long history of demonstrating its primary commitment to hardening our industry against attack and we've shown that consistently, whether it is petitioning the Federal Government for new photo IDs or petitioning them for numbers to call in suspicious activity, guidelines for suspicious financing, whatever.

We have always said we want to be first and foremost a partner of the Federal Government as we harden our industry against attack.

Last October, the TSA came forward with a proposal called the Large Aircraft Security Program. Unfortunately, it applies to very small airplanes and it doesn't recognize the inherent nature or the type of operations that we have in general aviation. Basically, it's a cut and paste of commercial regulations.

Over the course of several months, hearings have been held around the United States that have stimulated over 7,000 comments to the docket, all in a number of areas, including third parties, independent oversight, looking at things like pilot backgrounds and aircraft weight.

I think that over the course of the past couple months, we have made some progress. We are in conversations with the TSA. It appears that they are coming to a better understanding of the unique situation that general aviation is in and have expressed a desire to work with us to get reasonable, workable and effective solutions in place, and I think we are making progress in all of those areas, but I don't have anything definitive to report to you.

Senator PRYOR. That's good news. What is your sense of the current status of that rulemaking? Do they have a time frame in which you think they'll act?

Mr. BOLEN. No. The comments to the docket closed on February 27. The most recent meeting that several of us from industry had with the TSA was May 6 and clearly there are additional areas of conversation that need to be had before they go forward, but there is a sense that they are growing in their understanding of general aviation and we are coming closer to finding reasonable, workable, and, most importantly, effective solutions.

Senator PRYOR. Do any of the other witnesses want to comment on the Large Aircraft Security Program before I move on?

[No response.]

Senator PRYOR. OK. Let me ask my second question, if I can, and that is, for Mr. Barclay, the question of passenger facility charges.

There has been two bills in the Congress and they're pretty different in how they approach this, but basically I'd just like to get your thoughts and your preference on how you'd like to see the Congress resolve that.

Mr. BARCLAY. I think it was before you came in. As I said, the issue right now is that the \$4.50 PFC was put in place back in 2000 and that's only worth \$2.50 in today's construction dollars.

So the request at the moment is to go to a level that would at least replace it to its purchasing power of 2000 and then index it for inflation. Congress has been put in the position of having a fixed-dollar ceiling that you regulate over what's a local charge. The local folks decide with their full checks and balances at local airports what the actual need is there, but they're living under this cap. So at some airports they don't need to increase PFC. Other airports badly need to because of the construction cycle they're in, and they're being limited on what they can do to build facilities that are needed by the airlines.

I mean, you're hearing this argument between Mr. May and myself. I have enormous respect for his members, but it's the argument between a landlord and a tenant, and the landlords out there, the airports, have to balance their tenants' desires for low costs with the need that airport facilities take a decade to build.

The new Seattle runway that just came onboard took 20 years to go from planning to implementation. So airports are seeking to provide the tools this system's going to need in 10 and 15 years to provide the capacity for the system.

Senator PRYOR. Mr. May, you want to comment?

Mr. MAY. It will come as no surprise to you, Senator, that we do have a modest disagreement here. Three or four dollars were appropriate in 2001 when the PFCs were set. Collections in the first full year, which was 2002, were about \$1.8 billion.

The projected estimate in 2009 to be collected is \$2.9 billion. Airlines and their passengers are currently paying roughly \$13 billion a year toward the airports through AIP PFCs and we know that the airports have unrestricted financial assets currently on the books of about \$27 billion.

So given the economic environment that we're in today, we're not in favor of lifting the caps.

Senator PRYOR. Thank you, Mr. Chairman.

Senator DORGAN. Senator Klobuchar.

**STATEMENT OF HON. AMY KLOBUCHAR,
U.S. SENATOR FROM MINNESOTA**

Senator KLOBUCHAR. Thank you very much, Mr. Chairman.

Mr. Bolen, we just had a hearing this morning on the travel industry, the tourism industry. Senator Dorgan has a bill that many of us are co-sponsoring on travel promotion and it was a very good hearing, sort of startling news in terms of the decrease, of course, which you pointed out, with general aviation.

And do you want to talk a little bit about the effect the economy's had and what came out a lot at the hearing was the negative effect it's had, sort of there were a few bad actors abusing travel and corporate travel when in fact we want to generally promote business travel.

The effect that this has had, and how perhaps the rhetoric should change so that we remember that one out of eight jobs in America is related to tourism and travel.

Mr. BOLEN. Yes. I think to be clear, following the automobile executives coming to Washington, an unfair and unfounded and unrepresentative stereotype of business aviation was promoted that has done untold harm to our industry.

As I said before, we have seen operations go down by over 30 percent, manufacturers laying off significant portions of their workforce, and a huge effect at FBOs which, of course, trickles down to general aviation airport funding. It has been a very difficult situation.

Now, clearly, business aviation has always followed economic cycles. So just like commercial aviation, we expand in times of expansion, contract in times of contraction, but this time has been farther, deeper and more significant. We believe a lot of that is because of this negative stereotype that has been perpetuated and that's why we've been so aggressive about explaining to people that general aviation is about doing things you can't do with other operations, and the benefits of visiting multiple sites in a single day, talking about proprietary information, going to locations where there is no good commercial airline service, or moving products. We're helping to try to explain to people what general aviation is all about in the United States and why it's so essential to our job base and a lifeline for our small towns and rural communities.

Senator KLOBUCHAR. Thank you very much. The "done right," just based on what some of your testimony is and other things I've heard, NextGen can increase air traffic capacity, reduce delays, improve safety and curb greenhouse gas.

The proponents say that one other lesser known benefit of NextGen is that it can help reduce noise pollution. It sort of seems counterintuitive because, as you know, one of the benefits is that it will allow aircraft to land and take off closer together.

So how can these things co-exist, that you can have NextGen allowing aircraft to fly closer together and have more landings and take-offs and presumably more aircraft in the sky, yet at the same time reduce noise pollution?

Ms. Blakey?

Ms. BLAKEY. I'm delighted you asked because it is a little counterintuitive, isn't it?

But the fact of the matter is that one of the terrific things about the kind of performance-based navigation and precision approaches and departures that you can have under NextGen is that you can go to virtually idle on descent to an airport. It's called continuous descent approach, and it means you're essentially on a glide path.

You also can have much greater precision and therefore much less time in the air. All of what we used to call dive and drive, where you hear throttle up, throttle back, throttle up, and go to specific altitudes, and often hold and wait is eliminated. Those holding patterns that we've all been a part of really do go away under this system.

So there is both tremendous new technology in terms of the procedures and the way we're able to apply them and just the simple efficiency in the system that's going to be there that has huge benefit for noise and emissions.

Senator KLOBUCHAR. You know, the FAA has said that 70 percent of air traffic delays are weather-related and we focus a lot on

weather in my state and one of the benefits of NextGen, as I understand it, is that it can integrate GPS with more accurate weather services.

At the hearing that we had back in March, the GAO testified that the FAA's working with the Department of Commerce to integrate into NextGen a cutting edge weather cube which describes the atmosphere in three dimensions, latitude, longitude and altitude.

If anyone can comment on where this is and how this could help with traffic management?

Mr. MAY. Senator,——

Senator KLOBUCHAR. Mr. May.

Mr. MAY.—there is a specific task force of the JPDO working on NextGen that is the Weather Task Force.

I can't tell you today exactly where that project is, but I know the answer is available and I'll be happy to make sure your office gets a detailed report on it.

[The information referred to follows:]

Essentially what this JPDO effort does is bring real time weather to all users and air navigation service providers (FAA) and enable better decision support tools to lessen the impact of weather on delays. Since 60–70 percent of delays are attributed to weather, providing a common picture of weather to users and providers, and integrating that into decision support systems, you should be able to lessen the impacts of weather on the National Airspace System (NAS). See the link below (executive summary will suffice) for more details if desired. This JPDO effort is in progress with an expected delivery date in the 2013–14 timeframe.

Through its Weather Working Group, the JPDO is developing the concept of the Four-Dimensional (4-D) Weather Cube. The 4-D Weather Cube will offer all users of the national air transportation system (*e.g.*, controllers and pilots), at all levels, the capability to display and utilize a common weather picture in their respective decision-making processes. This capability will rely on a virtual database that serves as a single authoritative source for government-based activities. A document entitled, "Four-Dimensional Weather Functional Requirements for NextGen Air Traffic Management", which contains more details on the 4-D Weather Cube, was released in January 2008, and is currently available *here*, on the JPDO Website.

http://www.jpdo.gov/library/4D_Weather_Funt_Reqs_V6_CSv2-2.pdf

Ed, I don't know if you've got any further information.

Mr. BOLEN. Well, rather than get into the specifics, I think this shows something that's fundamentally important about our efforts to move forward on NextGen and that is all of NextGen is not necessarily under the control of the FAA and it does depend on us pulling in different agencies, like NASA, like the Department of Commerce where NOAA exists, bringing in the Department of Defense, and making this a national priority.

I think that the FAA is the right group to lead the effort, but I think clear comments from the Senate on the importance of this and making it a national priority will encourage all of our other agencies to contribute their talent and experience to the effort.

Ms. BLAKEY. I think all of us who have flown in the system have experienced those days when the thunder clouds go up to what we're told by the pilot may be 60,000 feet. It's very impressive to look at the question therefore of how do you get through that.

The two things I would say about the weather work that's going on through the JPDO and through the FAA is you can combine much better weather sources right now than we have had and therefore get near-term benefits.

The efficiency of being able to do very precise en route routing means you can bring the planes closer together in terms of en trail separation and therefore those slots through the weather thunder clouds, you can take better advantage of them. Finally, there is the weather cube and more advanced research on better predictive capability where you really are going to be able to predict longer-term about what really will happen.

Senator KLOBUCHAR. It just made me think, in fourth grade I wrote a story about a weather machine, Moonbeam Mackeldorf, the man who can control the weather. So when I read about the weather cube, I thought this is really getting advanced.

All right. Thank you.

Senator DORGAN. Thank you, Senator Klobuchar.

Senator Begich.

**STATEMENT OF HON. MARK BEGICH,
U.S. SENATOR FROM ALASKA**

Senator BEGICH. Thank you very much, Mr. Chairman. Thank you all for being here.

And coming from a state where aviation is truly the lifeblood of what goes on from an economy, to literally life safety. We like to brag we're the small plane capital of the country when you think about how many small planes we have. You have a car and then you have a small plane more than likely.

Let me, if I can, I've got a few questions and, first, Ms. Blakey, if you—the comments Senator DeMint talked about, I would love to also hear at a later time some documentation on some of the concerns you might have, if you could share that with our office, too, I'd greatly appreciate it.

Ms. BLAKEY. I'd be delighted.

[The information referred to follows:]

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARK BEGICH TO
JAMES C. MAY

Senator Begich requested additional information on industry's position on the House passed repair station language in Section 303 of H.R. 915.

As President and Chief Executive Officer of the Aerospace Industries Association of America (AIA), I appreciate the opportunity to follow up on our brief discussion of Section 303 of H.R. 915 during the May 13th hearing on the Reauthorization of the Federal Aviation Administration (FAA). As you know, AIA's members along with our industry partners remain deeply concerned with the foreign repair station language contained in Section 303 of the House passed Federal Aviation Administration (FAA) Reauthorization Act of 2009 (H.R. 915). We believe this issue has the potential to create a serious trade dispute between the U.S. and other countries.

If Section 303 is enacted, countries covered under bilateral maintenance agreements will be forced to take reciprocal action (including twice annual inspections of U.S.-based, EU repair stations). This would halt implementation of the U.S.-EU Bilateral Aviation Safety Agreement which could, in turn, have serious repercussions affecting existing Open Skies agreements and threaten U.S. jobs and businesses relying on EU maintenance work.

Because the EU employs personnel sufficient to inspect only 100 of the 1,237 U.S.-based European Aviation Safety Agency (EASA)-certificated repair stations, most U.S. stations will lose their EASA certification and will be unable to repair European-registered aircraft. Those U.S.-based stations fortunate enough to receive the required inspections would be subject to additional certification fees, totaling as much as \$64,000 per year.

While there are those who believe the EU is bluffing, I can assure you that they are taking this issue very seriously. On June 22, 2009, Patrick Goudou of EASA in-

structed Daniel Calleja, Executive Director, EC Air Transport Directorate to evaluate the personnel and budgetary requirements of conducting reciprocal oversight of U.S.-based EASA repair facilities. Reciprocal actions will have an impact on three additional areas of international cooperation: flight training, U.S. airlines operations in Europe and certification of U.S. products by the EU. If acceptance of FAA certification of European pilot training were altered, it would harm an industry generating \$72 million in annual U.S. revenue. Further, if U.S. airlines entering European airspace were impacted, then U.S. airlines would be required to undergo and pay for EU certification prior to flying their profitable transatlantic routes. This would also result in a failure to reduce the fees and charges assigned to U.S. aviation manufacturers for the EASA validation of products certificated by FAA.

Governments across the globe depend on our industry as a powerful and reliable source of high tech manufacturing, engineering employment, advanced technological innovation, environmental stewardship, and export revenue. As leaders in the global marketplace, our industry is weathering the current global economic crisis and looks forward to playing a major role in its recovery, but in order to do so, national governments must avoid adoption of protectionist policies such as Section 303 in its current state. This would stifle our industry's ability to generate new growth and prosperity.

The current relationship between Europe and the United States fosters a climate in which the aerospace and defense sectors thrive. In this way, our member companies will continue to deliver products and services that contribute to global safety, security and economic prosperity. AIA's members appreciate your leadership and respectfully urge you to object to protectionist measures such as those in Section 303 of H.R. 915.

Attachments

- June 5, 2009 Letter from Daniel Calleja; Director, European Commission, Directorate F-Air Transport to Patrick Goudou, EASA Executive Director.
- June 22, 2009 Letter from Patrick Goudou to Daniel Calleja, Recommending Agency Measures for the Inspection of U.S.-based EASA Facilities.
- Industry One Pager Urging Opposition to Protectionist Measure in H.R. 915.

EUROPEAN COMMISSION—DIRECTORATE-GENERAL FOR ENERGY AND
TRANSPORT—DIRECTORATE F—AIR TRANSPORT
Brussels, Belgium—5 JUIN 2009

M. PATRICK GOUDOU
EASA Executive Director
By e-mail only

Dear Mr. Goudou,

As I announced to you over the phone, following the discussions in the aviation working group of the Council on 29 May as well as those of the EU-U.S. special committee held on 2 June in preparation of the meeting of the EU-U.S. Joint Committee meeting scheduled for June 24, I wish to come back to the urgent need for the Agency to prepare measures for the inspection of U.S.-based maintenance organisations which maintain and release to service European aircraft.

As the U.S. Senate is preparing to table proposals regarding this issue as part of the discussions of the U.S. FAA re-authorisation act, Europe needs to have urgently a set of draft measures which can be quickly put in place to ensure that, if the U.S. legislation obliges the U.S. administration to proceed twice yearly with inspections which cannot be delegated to its contractual partners, we will be reciprocating in full.

As the Community rules on the matter (Regulation (EC) No. 2042/2003 and its modifications) do not foresee any particular time-frame within which approved maintenance organisations have to be inspected to maintain/renew their approvals, the Agency can introduce such mandatory inspections twice yearly. Since the Agency is by law the competent authority of all maintenance organisations located outside the Community, the introduction of such measures would not contradict existing maintenance specific bilateral agreements between Member States and the U.S. Besides, if the U.S. proposed rules are enacted, they will equally affect maintenance organisations in the Community irrespective of the existence of bilateral agreements.

I would be grateful for receiving draft measures in advance of the EU—U.S. Joint Committee scheduled for June 24, so that the matter can be also discussed in that committee with the U.S. side.

Finally, I would appreciate receiving information on the financial and human resources the Agency plans to deploy to carry out these extra oversight activities.

Yours sincerely,

DANIEL CALLEJA

EUROPEAN AVIATION SAFETY AGENCY.
Cologne, Germany, 22 June 2009

Mr. DANIEL CALLEJA CRESPO,
Director,
Directorate F—Air Transport,
Directorate General Energy and Transport,
European Commission,
DM 24 05/153,
BE-1049 Brussels, Belgium.

Subject: AGENCY MEASURES FOR THE INSPECTION OF U.S. BASED ORGANISATIONS
Attachments: Manpower requirements table and draft tender*

Dear Mr. Calleja Crespo,

Thank you for your letter dated 5 June 2009 (Ref: TREN F3—OK/vp D2009) 55777) concerning the above mentioned subject.

The Agreement between EC and the U.S. signed on 30 June 2009 is based on mutual trust of each other's system. Therefore, the legislative proposal affecting the U.S. FAA Reauthorisation Act that would require the U.S. FAA to inspect twice yearly all 325 foreign repair stations located in the Community serving American airlines particularly contravene the confidence built in the regulatory oversight carried out by both parties.

As a result, I do have the same opinion that measures should be put in place to make sure, that the European side will act in a reciprocal manner, if the above mentioned act is finally adopted. Therefore, the Agency considers that the following measures can be put in place:

EASA to carry out oversight of all 1,233 U.S. repair station approvals of stations located in the U.S. that have been granted an EASA 145 and are currently surveilled by the FAA.

For this purpose, an invitation to tender is currently under preparation and will be launched shortly to establish a service contract to conduct a study aiming at defining the most efficient way for oversight of U.S. repair stations applying for, or having, an EASA approval. The study should, in particular, consider the establishment of local EASA offices in the U.S.

The requested service contract (see enclosed draft) will include:

1. Identification of U.S. Maintenance Organisations having an EASA approval, and their location in the U.S.
2. Identification and evaluation of possible solutions for ensuring direct approval and oversight of U.S. Maintenance Organisations (including two inspections per year of the approved facilities); such as direct oversight from EASA Headquarters and establishment of local offices.
3. As part of the evaluation, the study should estimate, for each solution (as relevant) the staff needed for the good conduct of operations and their level of expertise.
4. Concerning the possible establishment of local offices, the study shall identify the number of local offices needed for efficiently approve and oversee U.S. Maintenance Organisations, and more generally, the costs associated to the establishment of such offices.
5. In addition, the study will have to consider the legal aspects linked to any solution such as the impact of the associated costs on the current fees and charges regulation, the need for amending regulatory texts as well as other general legal issues such as U.S. emigration rules in the case of establishment of local offices.

Moreover, as a preliminary outcome to the above mentioned contract, my services have indentified the following options in case that EASA carries out direct approval and oversight of all 1,233 repair station located in the U.S.

* These attachments were not made available to the Commerce Committee.

Option 1: All surveyors are based in Europe, the surveillance activities will be organized from Europe. This option could serve as the initial option before all open legal questions with regard to a deployment in the U.S. are dealt with.

Option 2: All surveyors are based in the U.S. including managers and support staff. This option could be activated if all legal prerequisites for a deployment in the U.S. have been met.

In the attachment to this letter you can find the manpower requirements for the above mentioned options.

Financial aspects:

For the time being EASA is raising fees in accordance to Commission Regulation (EC) No. 593/2007, Part III, No. 1: "Acceptance of approvals equivalent to "Part 145" and "Part 147" approvals in accordance with applicable bilateral agreements," that means 1,500 EUR for an initial approval and 750 EUR for renewals of existing approvals.

It must be clarified when the status of these approvals will or should change from a "Bilateral" status to a "full" Maintenance Organisation Approval i.a.w. Part I—table 9 if the aforesaid Regulation.

To prepare for this change there should be an additional *Intermediate measure*. The purpose of the intermediate measure is to inform the U.S. industry as soon as possible of an envisaged change in applying the Fees and Charges Regulation.

By letter to all 1,233 EASA Maintenance Organisations in the U.S., EASA will request information on the number of employees of the affected repair station and on the technical rating the affected Maintenance Organisation will have to be applied for if their status changes from "Bilateral accepted approval" to a full EASA Part 145 approval. This letter would serve the purpose of informing all maintenance organizations on the negative impact of the envisaged change, and this will trigger most probably some reactions in the repair station community.

Based on the replies EASA be in a position to evaluate:

- The income which could be expected on the basis of the rating applied for and the number of employees and
- The total number of repair stations which will be interested in keeping their approval after the envisaged status changes.

EASA draft measures:

Letter to U.S. industry: July 2009

Launch study: July 2009

End study: September 2009

Choice of option following the study: October 2009

Deployment: November 2009 to June 2010

This includes definition of transition measures, recruitment and deployment of staff and the tendering process of the activities, as necessary.

Start of full implementation of oversight: July 2010

This does not take into account the further actions, as described in the EASA Briefing Note on the Consequences of the absence of ratification of the Agreement between the U.S. and the EC on co-operation in the regulation of civil aviation safety, that would be deemed necessary by the Commission, such as, actions resulting from a change to the Annex 2 to this Agreement and the oversight that will be made necessary when Regulation (EC) No. 216/2008 fully enters into force.

We would appreciate if the Commission would agree to these measures.

Yours sincerely,

PATRICK GOUDOU,
Executive Director.



The U.S.-E.U. Safety Agreement Promotes Safety Cooperation and Supports Well-Paying U.S. Jobs

The United States has more than 4,000 FAA-certificated repair stations including 1,237 that hold certificates issued by the European Aviation Safety Agency (EASA) to work on European aircraft. Section 303 of the Federal Aviation Administration (FAA) Reauthorization bill passed by the House (H.R. 915) risks many of the 130,000 jobs at these dual FAA/EASA repair stations by violating the 2008 U.S. – E.U. Bilateral Aviation Safety Agreement (BASA).

Violating the U.S. – E.U. BASA Will Undermine Safety and Cost American Jobs

- Under the BASA, the FAA inspects the 1,237 EASA certificated repair facilities in the U.S. according to EASA regulations and EASA inspects the 425 FAA certificated repair stations in Europe according to FAA regulations.
- The House bill requires the FAA to conduct at least two inspections of FAA certificated foreign repair stations (even those inspected by EASA) annually. This requirement violates the BASA.
- U.S. - E.U. cooperation provided under the BASA increases safety at repair facilities and allows the FAA to use its resources more efficiently and effectively in the U.S. and in other parts of the world. The U.S. has operated under reciprocal maintenance agreements with European nations since the late 1990's.
- There has never been, nor is there now, a safety issue with FAA certificated repair facilities in Europe that justifies violating the BASA and undermining years of safety cooperation with our European safety partners. In fact, over the past decade, the National Transportation Safety Board has not cited work done at an FAA certificated foreign repair station on a U.S. registered aircraft as the probable cause in an accident investigation.
- If the U.S. breaks the BASA, the E.U. will be forced to send inspectors to the United States to inspect the stations they certificate. As the E.U. does not have sufficient foreign inspection personnel, EASA has suggested that it will only have the capacity to inspect 100 repair stations per year. This means that more than 1,100 remaining U.S. repair stations would potentially lose their ability to work on E.U. aircraft and would likely be forced to cut U.S. jobs.
- Repair stations lucky enough to receive inspections will see their average certification fees rise from the current average of \$960 to \$64,200 (based on two EASA inspections per year), a total dollar impact of \$78 million on U.S. stations. This increase in fees would be especially difficult on the 62% of these stations, which employ fewer than 50 people.

Reciprocal Actions Will Harm Other Aviation Sectors

Reciprocal actions taken in response to the voiding of the BASA could result in the E.U. no longer recognizing U.S. training of European pilots (an industry generating \$72 million in annual domestic revenue), no longer accepting certification of U.S. airlines entering European airspace, and failure to implement a reduction in the fees and charges assigned to U.S. aerospace manufacturers for EASA validation of products certificated by FAA. These actions will further the economic distress the aerospace industry is already experiencing.

Help protect the safety of our aviation system and the 130,000 American workers employed by FAA/EASA-certificated repair stations by ensuring that proposed changes to the certification of foreign and domestic repair stations do not violate U.S. international obligations.

Senator BEGICH. Let me first go with Mr. Bolen, and I don't know if you can answer this, but you kind of moved into it a little bit with general aviation and that is the concern that we have not only with general aviation but also small carriers in regards to some rules that TSA was busy getting ready to implement and then they pulled back in where they're headed.

Can you give some commentary? I like to always describe Alaska, we're rural but we're extreme rural in a lot of ways, and the rules that TSA may lay down will dramatically impact the commerce that occurs in rural Alaska, and I don't know if you have any comments that you want to make.

I know most of what you all do is commercial, but I'm just curious if you have some commentary.

Mr. BOLEN. Well, I think Alaska has got a lot about it that's just plain bigger and the way that these rules would affect general aviation would have even bigger impact in Alaska because of its

more rural nature and because of the tremendous amount of aviation that does go on up there.

But I think the fundamental issue is trying to help TSA understand that general aviation operations are unique and this is something that the FAA has always understood. They have different safety regulations for commercial carriers, Part 121, for scheduled airlines, for commercial operations, Part 135, for private operations, Part 91, different safety regulations targeted to unique operations that yield an equivalent level of safety.

We want the same thing in the security field where we have targeted regulations for the specific type of industry and the specific type of operation. A regulation that would make sense for a city bus would be different from a company's own passenger van or delivery truck and we're trying to help make that work together, and I think we are making some progress.

Senator BEGICH. That was—you picked my next question. Do you think there's some progress occurring in that arena?

Mr. BOLEN. I do. There seems to be an openness to dialogue that is encouraging.

Senator BEGICH. OK. Very good. I know one specific one which may sound odd to some people, but, you know, we have actually a state law in our safety kits, what's required to be on a plane, and one of the requirements is that you have a firearm on that plane because of the hunting and other activities that occur in a commercial endeavor, that if you're trapped out there, you know.

Mr. BOLEN. Right.

Senator BEGICH. I actually joked with a TSA person. I'll take our safety kit, you take yours and see who comes out because I think we will survive, but I think that's—but you feel that there's some progress?

Mr. BOLEN. I do, and you're touching on it. Now, a prohibited items list makes sense when you are flying commercially. You are opening yourself up to the general public. It is different if you're flying in a separate operation.

So we have in the prohibited items list proposed by the TSA, a tool company could not take tools on their airplane. You couldn't take a gun on the airplane and, as you know, in Alaska it's required for survival reasons. So we're just walking through exactly what the operation is, what's been proposed and different ways, alternative ways we could ensure that general aviation is every bit as secure as any other industry in the United States.

Senator BEGICH. Very good. Thank you. Thank you for your comments about the NextGen. You know, we are the—we see the value of this and I think all of you, and if I'm wrong about this comment, just acknowledge it, but what I hear, and I've heard over and over again, this can be accelerated. It's not a 2025 project. It really could be a 2012–2013–2014, somewhere in that range. Am I missing that at all?

Ms. BLAKEY. No, and it's important to note that Alaska pioneered a lot of the technology that we are now deploying in the Lower 48 and throughout the world.

Senator BEGICH. Absolutely.

Ms. BLAKEY. So there's a lot of credit due on that.

Senator BEGICH. Thank you. Then on that, I'm just about to run out of time, and I guess to anyone, I'll first maybe direct to Mr. May, if you could answer.

What—you see this as a national priority, so therefore applying that \$6 billion number, give or take in there that you had thrown out there, but some way to fund this, one of the comments you had made was—mentioned was reappropriations or redesignating some of the stimulus money or doing something.

Can you help me be specific? The reason I ask this, I'm a big fan of NextGen. I mean, I obviously, just as I say, for Alaska reasons, it has proven its worth in value beyond what I think anyone had anticipated. So do you have some specific examples that you would throw out there or maybe not just this moment but could help us in the future because I think this is one that we should fund, get it done and move on.

Mr. MAY. Senator Begich, I'd be happy to come by and give you a whole host of very detailed specifics, but, in general terms, we thought this should have been included in the Stimulus Package. [The information referred to follows:]

WHAT SPECIFIC ACTIONS ARE NEEDED?

- Automatic Dependent Surveillance-Broadcast (ADS-B)—ADS-B requires new equipment, ground infrastructure and procedures using a GPS source. The cost/complexity of equipment installation varies significantly depending on current aircraft configuration. Accelerating deployment of ADS-B ground stations is critical, as are extensive revisions to airspace and pilot procedures to reflect new spacing criteria.
- Area Navigation (RNAV)/Required Navigation Performance (RNP)—RNAV/RNP requires new equipment and procedures. Installation or upgrades to existing flight-management systems, installation of a GPS position source and integration with newly installed/existing displays drive equipment costs. Extensive revisions to airspace and pilot procedures will be needed.
- Electronic Display Upgrades—Some aircraft will require the addition of new specialized display screens to utilize ADS-B and RNAV/RNP; some will require a supplemental display, such as an Electronic Flight Bag. These screens will accurately display an airplane's position relative to itself and other aircraft. These displays can also be used to show new optimum flight paths.
- Ground-Based Augmentation System (GBAS)—GBAS requires new equipment, ground infrastructure and procedures. Special avionics are necessary to receive the corrected GPS signal information and must be integrated with the aircraft's flight-management system. GBAS also requires several antennas, a broadcast transmitter and a processing unit at each airport. In some cases, a single installation can service multiple airports due to its 30-mile-radius effective range. Some procedural changes will be required.
- Localizer Performance with Vertical Guidance (LPV)—Using GPS and leveraging the existing Wide Area Augmentation System (WAAS) enables more accurate flight-path guidance. Action is limited to the development, certification and publishing of procedures.

I know there are a lot of very devout supporters of rail here, high-speed rail in particular, for the Eastern Corridor. If we're going to spend \$13 billion on rail and it's a long-term project, why not spend \$6 billion on aviation which can be done in 3 to 4 years and yield equal benefits from an economic as well as environmental perspective?

You know, we're going to—we've got \$41 billion a year in delay costs to business and to passengers and others. We need to resolve that. So this is a real investment in the economy, the trans-

formational nature of the economy here in the United States, and we think it's high time.

Senator BEGICH. We'll take you up on that offer. Thank you very much.

Mr. MAY. You're on.

Senator BEGICH. Thank you.

Senator DORGAN. Senator Lautenberg.

**STATEMENT OF HON. FRANK R. LAUTENBERG,
U.S. SENATOR FROM NEW JERSEY**

Senator LAUTENBERG. Thanks, Mr. Chairman, and I welcome all of you. I have an active interest in aviation.

Mr. May, please don't pick on rail. One day in New York City, more people go through Penn Station in New York than all three major airports from New York City.

Mr. MAY. Not picking on rail, sir. Just want to have our just due, as well.

Senator LAUTENBERG. No, no. I want you to keep flying, flying high, fly on time, fly, continue the safety, safe operating record that this country of ours has had. It's fantastic.

And Mr. Bolen, you know, you talked about the foolishness of isolating the fellows who came into town looking for money using their private aircraft, and it was a foolish individual act and it shouldn't point to the industry as being any way left off.

See, the industry, the general aviation industry is a critical one and I for one would like to see its growth and its development and its contribution that it makes. You know, in New Jersey we have probably the most active general aviation airport at Teterboro that exists in the country and it's a good airport and we want to keep its efficiency and value.

What's happened with the industry, the manufacturing side of general aviation now since the recession just in general and relatively short-term? If you can give me an idea, because I think that's where the hurt comes to the industry rather than the fact that these silly guys did this.

Mr. BOLEN. Yes. Well, you mentioned Teterboro. At Teterboro, operations are down 35 percent this March compared to March the previous year, 35 percent fewer operations. That means fewer airplane sales. It means less fuel being sold by FBOs.

We are experiencing the greatest downturn in our industry since the Great Depression.

Senator LAUTENBERG. Manufacturing side?

Mr. BOLEN. Yes, manufacturing and operations. This is affecting the FBOs that are trying to sell fuel. It also affects another group, the people that are trying to insure airplanes, broker airplanes, and finance airplanes.

There's a huge infrastructure that starts with the airplane itself but it builds out. It's maintaining it, it's insuring it, it's financing it,——

Senator LAUTENBERG. I don't mean to interrupt. How about the restrictions on general aviation? You know, you can't come in here without a rigmarole of some significance to get in. The security question is one that's been very hurtful, I think, also to the industry.

I just wanted to get some sense of what's happening on the manufacturing side. I know that that has to be hurt badly where there were long waits for deliveries of aircraft, I don't think they exist anymore, and so I thank you for that.

For Mr. May,——

Ms. BLAKEY. Senator, if I might just a moment because we represent the manufacturers from that standpoint and we have seen tremendous problems in terms of production cuts, layoffs in some cases of much as half of the workforce.

Here you're talking about real American icons, Hawker, Beechcraft, Cessna, Gulfstream, and these are companies that have traditionally contributed tremendously to our export positive balance of trade, because, remember, we manufacture aircraft here that virtually you can't find anywhere else around the world. So it's an important thing to focus on.

Senator LAUTENBERG. Mr. May, the airlines have promised to do more to avoid having passengers stranded on the tarmac but nearly every month we hear another horrific delay, and I recently flew in to LaGuardia Airport because my home is midway between LaGuardia and Newark Airport in New Jersey and it was advertised by the pilot to be a 45-minute flight and everybody felt good about that. We pulled away from the jetway and he came on the air, he said, "Gee. I'm sorry. We just got notice that there's a two-hour delay at LaGuardia." The sun was out. The same sun that was out in New York.

Where would you point a finger as to the principle reason for these delays?

Mr. MAY. Senator, I think it is squarely at the feet of the Air Traffic Control System and the inefficiencies that continue to exist there.

As you know, 50 percent of all the delays in the system originate in New York. We now have operational caps on all of the major airports in New York. We have significantly cut capacity in all of the airports in New York and yet New York as a region falls behind its peers in almost every single category.

So we think, and we're very worried about the upcoming summer events, that either with—even with the caps and cuts in capacity, we could be facing a tough year in New York for delays and I think it ought to be a priority of the new FAA Administrator to try and make sure that they tackle those problems specifically.

One of the solutions is going to be the implementation of the many recommendations that were made as part of the New York Delay Task Force that was put together a year ago. Many of those recommendations have still not been implemented.

I think we have to pay attention to trying to make sure that the metrics, the measurement metrics are being adhered to, that the call rates are appropriate to the airports and to the conditions at the time.

I think there are a number of solutions. We'd be happy to communicate them directly to your office.

Senator LAUTENBERG. Thank you. Thanks, Mr. Chairman.

Senator DORGAN. Senator Lautenberg, thank you very much.
Senator Thune.

**STATEMENT OF HON. JOHN THUNE,
U.S. SENATOR FROM SOUTH DAKOTA**

Senator THUNE. Thank you, Mr. Chairman, and thank you for having the hearing and getting this debate going. We need to get the FAA reauthorized. They are the principal agency responsible for managing air travel and ensuring that it's safe and we need to get the legislation that's been tied up here for a long time going and hopefully this committee and the Senate will be able to do that.

I want to come back to the question of air space management and it, of course, improves both the safety and efficiency of the travel, and if, in response to Senator Begich's question, you can get NextGen implemented much more quickly than some have stated and if that's in the next 5 years, I don't know when it is, but prior to that system being implemented, what steps do you believe can be taken to improve air space management?

I guess I would direct that at anybody on the panel.

Mr. BOLEN. Well, let me start with that, saying that, you know, as has already been mentioned, a lot of the delays emanate from the New York area. That is the problem area Number 1.

An aviation rulemaking committee was convened over a year ago where the community came together and laid out 77 different things that could be done in the New York area to help reduce those delays. Many of those have not been done.

I will say and want to make clear that at no point in the discussions was it ever believed that general aviation was the cause of any delays in the New York area or elsewhere and that was testimony from NATCA itself and went all the way through looking at how the general aviation operations in the New York area have been going down over the past several years and it's down precipitously again this year.

Ms. BLAKEY. Let me also add, Senator Thune, that I think that there is a tremendous opportunity in moving ahead more aggressively with new procedures. A lot of our aircraft right now have good technology on them that we could take advantage of for performance-based navigation, RNP, RNAV, and we'd like to see those in the most congested airports.

The FAA operates with a set of 35 airports that they particularly regard as the ones that are most critical in the system with the most traffic. If we could see RNP, RNAV, and performance-based procedures in all of those airports quickly, and it's a matter of designing them and, frankly, the private sector can step up and provide more of that as well as those that are done within FAA, but putting a priority on those airports would leave a tremendous amount of latitude in the system that we don't have right now.

Senator THUNE. What is keeping that from happening? Is that just the will to do it? Is it a resource issue? Why is the FAA not doing it? And back to your question or to your answer, why are we not then implementing these 77 recommendations that were made about the New York airport? I mean, I want you—I'd like, Mr. Bolen, if you could answer that, but why are we not doing the things that you mentioned?

Ms. BLAKEY. Part of it has been a resource issue. It costs money, obviously, to design new procedures. There's a tremendous amount

of exacting work that goes into it when you lay out a new flight path, but the fact of the matter also is that a number of opportunities are there from the private sector.

RNP in Alaska was paid for significantly by Alaska Airlines. Southwest Airlines is also moving out very aggressively in new procedures for the airports that serve them and for their aircraft.

So the private sector can do more of that and the FAA is moving to allow not only FAA procedures but much more work by private companies which will get it done a lot quicker and that's important.

Senator THUNE. Mr. Bolen.

Mr. BOLEN. Senator, I think largely we lost our focus. At that time there was a tremendous focus by the Administration on doing slot auctions that I think were to the detriment of some of the other 77 proposals. Now that that issue seems to be behind us, I think we can refocus our attention and get some of those done.

Mr. MAY. Senator, one area that we think is critical, there was a call for and on behalf of the industry broadly to create a—this is an overworked term currently but at the time it wasn't—New York Czar, if you will, to oversee performance in that market.

I think that Czar status has been reduced to project manager status and we need somebody who can have measurable metrics and enforce those metrics throughout the system in New York and who has the authority to do that.

I would hope that would be one of the things that the new FAA Administrator would pursue.

Senator THUNE. Let me ask just one more question, if I can. My time is running out.

But everybody's highlighted the—and Mr. Barclay, you highlighted, too, I think the trouble of airline delays in your testimony. As you know and most of you know, I've advocated airlines disclosing on their websites notifying consumers and fliers before they purchase airline tickets about whether the flight is chronically delayed or chronically canceled and I'm talking—obviously going to try and get that provision included in the Committee's bill.

What do you believe can be done to help prevent and shorten these delays? I mean, we talked a little bit about the New York situation, a little bit about the technology. Anything else out there that—

Mr. BARCLAY. Well, adding capacity, adding—

Senator THUNE. I know that half of them are weather-related or more.

Mr. BARCLAY. Yes. And when Atlanta adds a new runway, there was a tremendous reduction in delays of not only in Atlanta but people trying to connect through Atlanta. So focusing on capacity, particularly at the major hub airports, is an enormously important issue for reducing delays.

The airlines do have an issue that the Federal Government owns the production line of a major commercial industry and that's the airlines. So this Committee's focus on saying how can we take that production line, run it better, run it more efficiently, is tremendously important. A lot of it is about focus and resources and you can do a lot.

Senator THUNE. Thank you, Mr. Chairman. Thank you all very much.

Senator DORGAN. Senator Thune, thank you very much.

I think this panel demonstrates the breadth of the issues one has to consider. The people who run the airports, the staff at the Air Traffic Control System, the airline company that have the planes, the pilots and the flight attendants that get the plane in the air, the fixed base operators, the caterers, the fuel suppliers. I mean, the breadth of this issue and its impact is very substantial.

Let me thank the panel for your input and encourage you, if you have additional things to offer us, feel free to send it to us in writing. We'd be happy to do that and we will keep the record open for 2 weeks.

Ms. BLAKEY. Thank you.

Senator DORGAN. Thank the panel very much.

We will now call up the second panel. If we can ask your assistance and ask those who are going to serve on the second panel to come forward.

Mr. Patrick Forrey, President of the National Air Traffic Controllers Association; Captain John Prater, the President of the Air Line Pilots Association; Mr. Robert Roach, General Vice President of the Transportation International Association of Machinists and Aerospace Workers; Mr. Ken Hall, Vice President-at-Large, International Brotherhood of Teamsters; Mr. Tom Brantley, President, Professional Aviation Safety Specialists; and Mr. William McGlashen, Executive Assistant to the International President, Association of Flight Attendants.

If you would all please be seated and we will clear the room and proceed.

All right. We appreciate the witnesses, we appreciate your patience. I have some bad news for you. There are three votes about to begin. So we will necessarily be required to have a recess, but we're going to begin and when the three votes start, I will alert you and we'll decide how long a recess that we're going to have to have.

Mr. Patrick Forrey is President of the National Air Traffic Controllers Association.

Mr. Forrey, welcome, and as I indicated to the other panel, your entire statement will be made a part of the permanent record, and we ask that you summarize.

**STATEMENT OF PATRICK FORREY, PRESIDENT,
NATIONAL AIR TRAFFIC CONTROLLERS ASSOCIATION**

Mr. FORREY. Chairman Dorgan and the Distinguished Members of the Committee, thank you very much for giving me this opportunity to testify this afternoon and provide you all with the perspective of FAA Reauthorization from the men and women who operate the National Air Space System.

The ongoing contract dispute between NATCA and the FAA is on the verge of ending. Two weeks ago Secretary LaHood announced that former FAA Administrator, Jane Garvey, will oversee a team of mediators to help negotiate a fair contract between the FAA and NATCA.

It is our hope that the negotiations will produce an equitable contract quickly so that the matter can be put behind us permanently. We applaud both Secretary LaHood and President Obama for recognizing the critical and irreplaceable role that the dedicated safety

professionals and employees play in the safe operation of the National Air Space System.

To ensure that this matter remains in the rear view mirror, NATCA supports the inclusion of language similar to Section 313 of S. 1300, the Aviation Modernization Act of 2007, which provided that in the event of a future dispute, the matter would then go before mediation followed by binding arbitration.

This provision was included during the 110th Congress at the behest of Senator Trent Lott, then Republican Ranking Member of the Subcommittee, and, of course, Chairman Rockefeller, who both wanted to ensure that the Congress would never have to deal with another contract dispute between the FAA and its employees.

The imposed work rules and its effects on the controller retirement and attrition rates have been well documented. The DOT Inspector General Report released on April 23, stated that the retirement wave hit record numbers in 2007 and 2008 and is projected to increase through at least 2012.

The report goes on to say that the FAA faces an increasing risk of not having enough fully-certified controllers in its workforce with 27 percent of the workforce now in training compared to 15 percent in 2004.

The IG also states that the staffing ranges used in the FAA have yet to be validated and therefore cannot ensure that they truly represent the facility needs.

NATCA supports including language in the FAA Reauthorization Act of 2009 to provide for an objective third party assessment of the FAA's air controller staffing needs. NATCA's hopeful that a resolution to our contract dispute will lead to a more collaborative relationship within the FAA, as well.

Whether it is technological development, implementing air space redesign or realigning FAA facilities, NATCA has made recommendations to the FAA that could help improve safety and efficiency of air travel as well as transition to NextGen while saving critical tax dollars. Unfortunately, the FAA is ignoring our recommendations.

The FAA's ad hoc non-inclusive approach to facility realignments has been particularly frustrating. NATCA's worked collaboratively with the agency in the past during the creation of several regional terminal approach control facilities. However, this go-it-alone approach has also frustrated Members of Congress, such as Senator Mike Crapo of Idaho, who called the agency's plan to remove radar services from Boise to Salt Lake City, a decision in search of a rationale.

Last year, the FAA moved forward with plans to move the radar functions from facilities in Pueblo, Colorado, and Palm Springs, California, despite the NATCA warnings of insufficient staffing at the receiving facilities to safely accommodate the transfers.

We turned out to be right, unfortunately. Both locations have seen deteriorations in safety and services. An FAA manager at the Denver En Route Center wrote a memo to his employees earlier this year that a lack of experienced controllers at Denver TRACON made that facility unable to handle, safely and efficiently handle its traffic levels.

This decision to transfer Pueblo Airport's radar functions has proven too much for the Denver TRACON to absorb just as NATCA had warned, and at Southern California TRACON, the IG warns that it is one of the most critically understaffed facilities in the United States with overtime leaping an incredible 400 percent in the 2 years since the transfer of Palm Springs air space radar duties.

With trainees expected to make up over 40 percent of the TRACON's staffing later this year, the IG warns that the extremely high training ratio has the potential to overwhelm training.

In Memphis, the FAA plans to move forward next month with another unnecessary tower radar split. Again, the staffing is inadequate to facilitate this realignment in a safe and efficient manner.

NATCA instead recommends that the FAA postpone its realignment efforts at Memphis and elsewhere until the agency has had a new administrator in place and Congress has had the chance to pass a comprehensive reauthorization bill.

We join the GAO in recommending the implementation of a process that will allow for the meaningful involvement of vital aviation stakeholders, including agency employees. Collaboration with NATCA is absolutely crucial to the success of the FAA's Modernization Plan.

Let me give you an example of where the FAA's moving ahead without NATCA and what is occurring as a result. ERAM, which stands for En Route Automation Modernization, is the NextGen computer system at our regional en route centers.

While NATCA supports ERAM as a good concept and necessary for the future of air traffic control, the FAA's testing has yielded more than 40,000 problem reports, including 100 that are considered crucial.

Recently, the glitch at the FAA during testing resulted in ERAM mistakenly being used as full time on live air traffic, resulting in the loss of flight data information and problematic handoffs between control facilities.

NATCA would like to see better briefings and training for controllers and better planning for ERAM tests. I will point out that NATCA and the FAA are currently negotiating for involvement in the project, but these talks began in the eleventh hour just before the FAA began testing.

At this time it is unclear as to whether the agency is prepared to reach an agreement with us.

Meeting a contractual deadline should not be the measure of success for ERAM. Technology must be deployed only when the technology is stable and fully functional to prevent putting the safety of the flying public at risk. NATCA and all the stakeholders must be included in such modernization efforts for the front end to prevent the type of mistake and costly delays we are seeing with ERAM.

Passage of a comprehensive FAA Reauthorization Act will ensure that NATCA and the rest of the aviation community are treated as vital stakeholders whose subject matter expertise is welcomed rather than shunned.

These changes are necessary if we hope to put our aviation system on the flight path to modernization.

Thank you, sir.

[The prepared statement of Mr. Forrey follows:]

PREPARED STATEMENT OF PATRICK FORREY, PRESIDENT,
NATIONAL AIR TRAFFIC CONTROLLERS ASSOCIATION

Introduction

The National Air Traffic Controllers Association (NATCA) is the exclusive representative of more than 15,000 air traffic controllers serving the Federal Aviation Administration (FAA), the Department of Defense and the private sector. In addition, NATCA represents approximately 1,200 FAA engineers, 600 traffic management coordinators, 500 aircraft certification professionals, agency operational support staff, regional personnel from FAA's logistics, budget, finance and computer specialist divisions, and agency occupational health specialists, nurses and medical program specialists. NATCA's mission is to preserve, promote and improve the safety of air travel within the United States, and to serve as an advocate for air traffic controllers and other aviation safety professionals. NATCA has a long history of supporting new aviation technology, modernizing and enhancing our Nation's air traffic control system, and working to ensure that we are prepared to meet the growing demand for aviation services.

Why Passage of FAA Reauthorization Is Urgently Needed: NATCA's Perspective

The air traffic controllers and aviation safety professionals that NATCA represents are highly trained and highly skilled; they deserve to have the most advanced technology to enable them to more effectively direct aircraft, contributing to a safer and more efficient National Airspace System (NAS). NATCA has been a vocal supporter of FAA Reauthorization and continues to urge swift passage of the legislation to facilitate safe and effective modernization of the NAS while maintaining, up keeping and improving vital human and physical infrastructure.

The current economic downturn and the subsequent decrease in flight volume present not only a challenge, but also an opportunity to improve the NAS so that air traffic controllers will be better able to handle the inevitable resurgence of our aviation industry when the economy fully rebounds.

NATCA remains completely committed to the safety and efficiency of the NAS and recognizes technology has the potential to improve safety, expand capacity, and increase efficiency. Therefore, we support the FAA's willingness to undertake the large-scale and long-term research, development and modernization project called the Next Generation Air Transportation System (NextGen). Yet the complexity and the risk of this program should not be underestimated. The GAO has stated that NextGen is a "high-risk effort"¹ because of its cost and complexity, making it imperative that the FAA proceed in a manner that maximizes the chances of success.

NATCA believes that the ultimate success of NextGen is dependent upon collaboration between the Union and the FAA. Currently, the FAA is prohibiting any meaningful level of collaboration with NATCA, allowing key NextGen modernization projects, airspace redesign and changes to air traffic control procedures to move forward despite serious outstanding flaws and unmitigated safety risks. The Department of Transportation Inspector General and the Government Accountability Office have both testified before Congress that stakeholder involvement prevents cost overruns and prevents project delays.

The Agency is also moving forward on ad hoc air traffic control facility and service realignment efforts without a comprehensive review procedure to determine whether the realignment provides an operational benefit to users, increases safety and efficiency, and/or saves the taxpayer money. FAA Reauthorization is needed to provide that review procedure and compel the Agency to subject all current realignment efforts to this needed layer of oversight, accountability and transparency. Just as with technological development, realignment efforts completed in a collaborative environment will ensure benefits are realized rather than squandered.

A restoration of what was once a great collaborative relationship is only possible with the existence of a collective bargaining agreement (CBA) and a fair process for

¹ U.S. House of Representatives Committee on Transportation and Infrastructure summary of subject matter for members of the Aviation Subcommittee from Aviation Subcommittee staff on *Air Traffic Control Modernization and Next Generation Air Transportation System: Near Term Achievable Goals* March 16, 2009.

negotiating future CBAs and other labor agreements. Air traffic controllers have been working under FAA-imposed work and pay rules for nearly 1,000 days. Two weeks ago, the Obama Administration announced that it was appointing former FAA Administrator, Jane Garvey, to lead a team of three to mediate the contract dispute between NATCA and the FAA. With this bold step, President Obama and Secretary LaHood are fulfilling a commitment to the safety and modernization of the air traffic control system and to the dedicated men and women safety professionals who run the system each day.

As the President and the Secretary have repeatedly made clear, a resolution to the dispute is critical to stabilizing the controller workforce, restoring a collaborative working relationship between controllers and the FAA, and successfully implementing the Next Generation Air Transportation System needed to spur economic development and increase the safety, efficiency and effectiveness of air travel.

As the President also made clear, the current process that was used by the FAA to unfairly impose its will on the controller workforce in 2006 is terribly flawed, but this process can be improved by an FAA Reauthorization bill. We supported this Committee's language last Congress in S. 1300 that provided a fix to the process by addressing the FAA Personnel Management System. Section 313 would restore fairness to the collective bargaining process and ensures that the Agency can never again unilaterally impose a work or pay rules upon its workforce.

NATCA's Recommendations for FAA Reauthorization

1. *Contract Dispute Resolution:* NATCA supports the inclusion of language similar to Section 313 of S. 1300, the Aviation Investment and Modernization Act of 2007, which sought to prevent future disputes between the Agency and its employees. The bill amended Title 49 to allow for, in the event of a bargaining impasse, the proposals to go through mediation and ultimately, binding arbitration. Implementation of such a process would ensure that Congress will never again find itself in the middle of a contract dispute between the FAA and NATCA.

2. *Realignment of Facilities and Services:* NATCA supports the inclusion of language in FAA Reauthorization that would ensure that all FAA realignment initiatives are considered in a collaborative environment and provide a specific operational benefit. NATCA supports the establishment of a workgroup of stakeholders to review all realignment proposals prior to the FAA beginning the realignment process, which we believe must include representatives of all of the affected bargaining units. Additionally, NATCA recommends that realignment be clearly defined as to prevent ambiguity and to provide clarity and uniformity to the process.

3. *Staffing:* NATCA fully supports and endorses an air traffic controller staffing provision within the FAA Reauthorization bill authorizing a third-party to conduct scientific study of the system's air traffic controller staffing need. This language would allow the FAA, Congress, and NATCA to objectively and accurately assess the current risk to the NAS and set benchmarks for resolving the staffing crisis. Just last month, a Department of Transportation Inspector General report stated that the FAA has not yet validated its staffing ranges and therefore cannot ensure it truly represents the workforce needs. The report also said that the "FAA faces an increasing risk of not having enough fully certified controllers in its workforce,"² further making the case that such a study is necessary.

4. *Modernization:* NATCA supports appropriate funding levels in the FAA Reauthorization bill to modernize the air traffic control system. The NextGen modernization project's initial plan lacked clearly-defined goals, leadership, and had begun without including stakeholders in the process. The problems associated with ERAM and airspace redesign, which are outlined later in NATCA's testimony, are demonstrative of projects that have run into problems at least partly because NATCA was not meaningfully involved. NextGen's success is highly dependent upon a cooperative environment for the development and implementation of new and pre-existing technology.

5. *Maintenance of Air Traffic Control (ATC) Infrastructure:* NATCA supports adequate funding for the maintenance of our ATC infrastructure. It is imperative that the funding of NextGen does not come at the expense of the NowGen. During the previous Administration, the FAA allowed existing facilities to fall into disrepair while focusing all its energy and budget on NextGen projects.

²FAA Document, "Controller Staffing at Key California Air Traffic Control Facilities," April 23, 2009, Report Number: AV-2009-047.

While NATCA supports the modernization of the NAS, we also insist upon the proper maintenance of the system. FAA facilities and ATC infrastructure must be maintained in a manner that ensures the safety and security of FAA personnel and allows aviation safety professionals the tools they need to do their jobs to the high standard of excellence we expect and depend on.

Realignment of Facilities and Services

Realignment—the consolidation, deconsolidation or reorganization of FAA facilities and services—must be implemented only when such changes enhance operational services, provide continued or improved safety, support and facilitate modernization of the NAS, is cost-effective, and the concerns raised by stakeholders are addressed and mitigated. During the past 20 years, the FAA has completed several realignments, including Southern and Northern California, and Potomac in the Washington, D.C. area. NATCA worked cooperatively and collaboratively with the FAA on these efforts because air traffic controllers and other vital stakeholders were included in the planning to help ensure the maintenance of safe and efficient operations, and to express their concerns about controller staffing levels, equipment, training, and redundancy.

During the previous Administration, the FAA began to separate radar and tower air traffic services at several airports across the country without seeking input from stakeholders. The FAA continued to move forward on these initiatives despite serious outstanding concerns over the effect such changes would have on safety and doubts over the operational benefit. Of particular concern in these cases was the staffing shortage, loss of staffing flexibility, barriers to coordination, and the deterioration of controllers' knowledge of operations.

In Colorado, for example, the FAA transferred the radar functions from the Pueblo International Airport to the Denver TRACON in September 2008, despite a significant shortage of certified controllers in Denver to absorb the new workload. The increase in workload led to a decrease in ATC services for users in the Denver airspace, leading a manager at the Denver En Route Center to advise his employees in February “that the volume issues created by eight different routes flowing into their airspace routinely creates situations that put their controllers at risk, and they are unable to provide the level of service our customers deserve.”³

A similar situation has arisen at the Southern California TRACON (SCT), which has seen overtime increase by a staggering 400 percent since the radar services for Palm Springs International Airport were transferred nearly 2 years ago. According to an April 23, 2009 report by the DOT Inspector General, SCT is not only the busiest TRACON in the world, handling over 2.2 million operations last year, but one of the most critically understaffed. The report states that SCT “has experienced a sharp decline in CPCs over the last 5 years . . .” and “. . . expects to have over 100 controllers in training later this year—which is more than 40 percent of its workforce and could overwhelm SCT’s training capacity.” NATCA does not believe that these are ideal conditions for absorbing additional radar responsibilities.⁴

At Orlando International Airport (MCO) the split has left the tower with significant levels of inexperience; more than fifty percent of MCO tower controllers have 5 years of experience or less. When the facility was combined this percentage was reduced to 35 percent, which, while still very high, was less dangerous.

For Miami and Philadelphia, also targeted by the FAA for tower/TRACON separation, NATCA offered an alternative configuration that enabled the facility to simultaneously maintain the advantages of a combined facility while reducing training time. After Congressional and public pressure forced the FAA to review this alternative configuration, the FAA ultimately agreed that the proposed configuration would resolve the issues at hand without creating additional safety risks. This sudden course correction revealed the need for a thorough and open selection and review process for FAA facility realignment initiatives.

The FAA conducted a study at Memphis International Airport (MEM) which found that a stand-alone TRACON at MEM would need to be staffed with 43 certified professional controllers (CPCs) while the tower would require 37. A split facility would therefore require a total of 80 CPCs.⁵ However the combined facility currently employs only 47 CPCs,⁶ less than 60 percent of what is necessary to operate

³ FAA Memorandum, “Denver Traffic,” February 19, 2009.

⁴ FAA Document, “Controller Staffing at Key California Air Traffic Control Facilities,” April 23, 2009, Report Number: AV-2009-047.

⁵ FAA Document “Needs Comparison for 4 Splits: MTP Comparison for the 4 Splits.”

⁶ Based on Payroll data provided to NATCA from the FAA. This data is current as of the end of FY 2008.

a split facility. Unfortunately, the FAA is rushing ahead to complete its split of MEM on June 7, 2009, instead of postponing the move until Congress has completed its work on FAA Reauthorization. In general, split facilities require additional staffing, as there is a reduction in flexibility when the workforce is split.

Additionally, controllers at combined tower/TRACON facilities must learn all aspects of operations required for safe and efficient arrivals and departures. Controllers therefore understand how their actions at one position effect the operations of adjacent positions, enabling them to optimize their performance for both safety and efficiency. When facilities are split this knowledge is lost. Not only will new trainees be denied the opportunity to train on all aspects of the operation, they will not even have the opportunity to observe operations at other sectors.

The FAA has an obligation to involve Members of Congress, the public, airport operators, pilots, controllers, and other stakeholders in the decision-making, planning, and implementation process of any agency effort that could affect the safety and efficiency of the airspace. Regrettably, the agency has chosen to exclude stakeholders from the process, ignore their concerns, and inform the public only after its decision has been made. This go-it-alone method allows the FAA to remain ignorant of authentic and substantial inadequacies in its planning and has led to the unnecessary and regrettable ATC service denigration in Southern California, Colorado and Orlando.

NATCA supports the inclusion of comprehensive language in FAA Reauthorization to ensure that all FAA realignment initiatives are considered in a collaborative environment and provide a specific operational benefit. We support the establishment of a workgroup of stakeholders to review all realignment proposals prior to the FAA beginning the realignment process, with representatives of all of the affected bargaining units included. In addition, to prevent ambiguity and confusion, realignment must be clearly defined.

Staffing

The State of the Air Traffic Controller Workforce

NATCA and the FAA began contract negotiations in July 2005 over a successor agreement to the 2003 extension to the parties' 1998 collective bargaining agreement. The FAA unilaterally declared an impasse after only 9 months of negotiations (in 1989, 1993, and 1998 the parties reached an agreement after an average of 24 months of negotiation). In September of 2006, the FAA did declare an impasse, as NATCA predicted, and unilaterally imposed work and pay rules (IWRs) on the air traffic controller workforce. This action not only violated the FAA's legal obligation to bargain in good faith, but it also violated fundamental principals of fairness. This action, in effect, stripped this union of its collective bargaining rights.

The effects of the imposed work rules have been devastating, not only to the working lives of controllers, but to the safety and integrity of the National Airspace System. Prior to the imposed work rules, NATCA officials warned that imposing work rules would result in a mass exodus of controllers from the FAA workforce and would result in dangerously low staffing levels. NATCA's predictions have proven accurate.

In the two fiscal years following the imposed work rules, 3,356 air traffic controllers left the controller workforce through attrition. Less than 2 percent had reached the mandatory retirement age of 56. Ninety-eight percent left before mandatory retirement.⁷

The FAA now insists that this exodus had been long anticipated and that it was the result of nothing more than an increase in retirement eligibility. This, however, is not the case. In FY2008 there were 947 retirements and 442 resignations, removals and deaths. Three months prior to the implementation of the IWRs, the FAA predicted there would be 645 retirements and 84 resignations removals and deaths in FY2008,⁸ approximately half of the actual attrition level.

In its April 23, 2009 report, the IG stated that "the retirement wave hit record numbers in 2007 and 2008 and is projected to increase through at least 2012 . . . FAA faces an increasing risk of not having enough fully certified controllers in its workforce—with 27 percent of the workforce now in training compared to 15 percent in 2004."⁹

As NATCA has previously testified, the gap between the FAA's prediction and the actual attrition can be attributed directly to the IWRs and the adverse work envi-

⁷Based on payroll data provided to NATCA from the FAA.

⁸Based on the "A Plan for the Future 2006–2015: The Federal Aviation Administration's 10-Year Strategy for the Air Traffic Control Workforce" June 2006.

⁹FAA Document, "Controller Staffing at Key California Air Traffic Control Facilities," April 23, 2009, Report Number: AV–2009–047.

ronment that those rules created. These rules removed career advancement opportunities, established new pay bands that decreased controller wages by an average of 30 percent, reduced the availability and duration of rest periods, instituted unpopular changes to the annual leave policy, and created an adverse work environment without a viable process to appeal or address managerial abuses of authority.

As a result of the new pay bands, veteran controllers who are eligible to retire have already worked their three highest salary years which will determine their pensions. Combined with the deterioration of working conditions and a more acute fear of errors due to increased workload, all incentives for experienced controllers to stay on board until their mandatory retirement age have been removed.

On the other end of the spectrum, new hires are experiencing the stress and challenge of air traffic control, coupled with poor treatment from management and B-Scale wages, and are choosing to leave the FAA in favor of careers in the private sector.

One former controller summed up the sentiments of many in his resignation letter to the FAA:

Under the FAA's new imposed work rules I cannot justify staying with the Agency . . . I do not feel I can continue to work in an environment that is so vindictive, or for an employer who is more worried about the bottom line rather than safety. I cannot justify staying when I can return to a company that knows how and makes it a point to take care of its employees. My take home pay will go up, my quality of life will improve and my workload will decrease.¹⁰

Fatigue

The staffing shortage has created an environment conducive to high levels of fatigue among air traffic controllers, as controllers are required to work excessive amounts of overtime and work on short-staffed shifts.

At Orlando International Tower and TRACON, for example, controllers were required to work an average of 558 hours of overtime per pay period in CY2008. If divided evenly among the fully certified controllers, each controller would have to work more than 14 additional hours per pay period¹¹—cutting available rest and recovery time almost in half. In its April 23, 2009 report on staffing and training issues at key FAA facilities in California, the DOT Inspector General found that overtime hours at LAX Tower, Southern California TRACON and Northern California TRACON significantly increased over the past 2 years, by 868, 400 and 120 percent, respectively.¹²

While moderate amounts of overtime can be absorbed into the system without noticeable effects on performance, excessive overtime introduces fatigue into the system. In order to absorb the fatigue-inducing effects of overtime, an individual controller must have sufficient time for recovery following a long week, while the workforce must be made up of non-fatigued controllers who can provide support during the shifts themselves. With the staffing shortage such as it is, this is impossible. In addition, excessive overtime negatively affects controllers' quality of life and interferes with home life issues, such as childcare, lowering the morale of the workforce.

The alternative to excessive overtime is to work each shift without proper staffing levels. A short-staffed shift often means controllers are afforded fewer opportunities for rest and recovery during the shift itself, being required to work longer on position and given shorter rest periods. Although the FAA had, until recently, limited time-on-position to 2 hours based on Civil Aeronautics Medical Institute (CAMI) data, this limitation was removed when the imposed work rules were instituted and is currently ignored throughout the system. At Atlanta tower (ATL), controllers report that they are given exactly 20 minutes of break time, regardless of the length of time on position or the intensity of the traffic they work.

Not only are controllers working longer on position, but the workload during that time has increased as well. On a short-handed shift, managers reduce the number of radar assistants (RAs), increasing the workload for the controller working radar. A controller working without an assistant is responsible not only for communication with aircraft, but also for coordination with other controller positions and facilities, as well as updating flight progress information. Additionally, managers may be forced to combine positions, creating greater complexity by requiring each controller to monitor greater numbers of conflict points and an increased volume of aircraft.

¹⁰ Employee resigned from Albuquerque ARTCC, in October 2006.

¹¹ According to NATCA records, there were 38 certified professional controllers (CPCs) at MCO.

¹² FAA Document, "Controller Staffing at Key California Air Traffic Control Facilities," April 23, 2009, Report Number: AV-2009-047.

One recent internal FAA document reported that as many as 56.3 percent of errors in Eastern En Route facilities occur when there are combined sectors, combined Radar/RA positions, or both.¹³

Inexperience and the Training Backlog

Rather than taking meaningful steps to stem the flow of experienced personnel, the FAA simply began a massive hiring effort. As a result, trainees now make up an extremely high percentage of the workforce. As of the end of FY2008, trainees (excluding CPC-ITS, previously certified controllers training on a new area or facility) accounted for nearly a quarter of the controller workforce (22 percent). This exceeds what the Inspector General of the Department of Transportation recently reported experts to consider the safe upper limit for the system.¹⁴ In many facilities the situation is even worse, with 48 facilities exceeding 35 percent trainees.

Staffing shortages and high trainee ratios have a direct effect on the efficiency of training itself. With so many trainees, and a small and shrinking number of Certified Professional Controllers (CPCs), there are a limited number of controllers capable of providing training, creating a backlog of trainees. At Miami Center (ZMA), for example, trainees have had to wait up to sixteen months from their start date to receive on-the-job training¹⁵ due to the facility's staffing shortage.

For the first time since the 1980s, trainees are being put directly into some of the most demanding and difficult terminal facilities after completing their classroom training at Oklahoma City. These facilities include Atlanta Hartsfield Jackson Tower (ATL), Atlanta TRACON (A80), Charlotte Tower (CLT), New York TRACON (N90), Dallas-Fort Worth Tower (DFW), San Francisco Tower (SFO), Southern California TRACON (SCT), and Northern California TRACON (NCT). These higher level facilities do not have training curricula designed to teach new hires aircraft types, airline identification and other basic fundamental air traffic control knowledge and skills. In the past, terminal trainees were placed in a lower-level tower to receive initial certification and would transfer to a higher-level facility as their careers and skills advanced. The imposed work rules, however, removed financial incentives for experienced controllers to transfer to more difficult facilities because many would actually take a pay cut with such a transfer. Because retirement eligible controllers are leaving in record numbers, staffing has become critical at these terminal facilities, forcing the Agency to hire trainees with no previous air traffic control experience.

Even as these trainees certify, the air traffic control system is still left staffed by individuals with little to no experience. These new hires are the future of air traffic control and have tremendous potential, but they are denied the opportunity to learn from experienced controllers and are forced to shoulder too much of the air traffic control burden at this early stage of their careers.

Since the implementation of the imposed work rules, the FAA lost more than 46,000 years of air traffic control experience through retirements alone.¹⁶ Nearly one third (27 percent) of air traffic controllers in the FAA have less than 5 years experience, and 40 air traffic control facilities have more than half of its workforce composed of individuals with less than 5 years experience.

Establishing Scientific Staffing Standards

In 1998, the FAA and NATCA agreed upon the optimal number of controllers for each facility based on a scientific study that factored in time-and-motion studies, sector complexity and workload, number of operations on the 90th percentile day, and relevant non-operational activities (*i.e.*, training, annual/sick leave). Although the current number of operations is similar to that of 1998,¹⁷ the FAA has abandoned these standards in favor of staffing ranges concocted to conceal the severity of the controller staffing shortage.

As part of its 2007 Controller Workforce Plan, the FAA established staffing ranges for each air traffic control facility, which it modified slightly in 2008. Rather than basing its staffing goals on an accurate and precise scientific assessment of each fa-

¹³ Weekly En Route (FY 08) Report May 30, 2008 Eastern Facilities, Federal Aviation Administration.

¹⁴ Statement made by Calvin L. Scovel II, Inspector General, U.S. Department of Transportation before the Senate Committee on Appropriations Subcommittee on Transportation, Housing and Urban Development and Related Agencies. April 17, 2008. "Key Safety and Modernization Challenges Facing the Federal Aviation Administration."

¹⁵ Interview with facility representative from ZMA.

¹⁶ Calculation assumes 25 years experience for every retiree. Twenty-five years of services is the minimum for retirement eligibility for most air traffic controllers.

¹⁷ According to the FAA's OPSNET database there were 45,394,027 instrument operations in FY2007 compared to 48,985,472 in FY1998 (93 percent).

cility's requirements for safe operation, the FAA has designed these ranges in order to deliberately mislead stakeholders about the staffing crisis currently facing the air traffic control system in this country. They were also designed in order to meet specific budget goals, with regional directors identifying the number of air traffic control positions it could fund at each facility and remain within its fixed budgets.¹⁸ NATCA has reason to believe that the FAA's official staffing ranges were engineered by the Air Traffic Organization (ATO) Finance office, rather than the ATO Safety Office based on a memo written by the workforce staffing manager, Jodi McCarthy.¹⁹

FAA attempts to justify this budget-based staffing standard by presenting a pseudo-scientific justification for its staffing numbers in its controller workforce plan. The FAA's reasoning is based on an average of the following:

1. Scientific Data—The FAA does not specify which study this refers to, who conducted it, or whether the study was conducted by an unbiased third party. It has thus far refused to provide NATCA with the details of the study parameters or the results.
2. Current Staffing at Peer Facilities—As the entire system is suffering the same staffing shortage, peer facilities will be equally understaffed. Therefore using these as a basis of comparison yields an anticipated deflated standard.
3. Past Staffing Lows—The FAA misleadingly refers to this comparison as the past year of "highest productivity." However, it goes on to define productivity as the highest number of operations per controller—or the year when the fewest controllers were relied upon to control the largest amount of traffic—without taking into account error rates, delays, or effect on the workforce.
4. Managers' Advice—The FAA misleadingly refers to this as "service unit input." This input did not include input from NATCA and came entirely from within FAA management ranks, who are under pressure to conceal the extent of the staffing shortage and assure Congress and the flying public that all is under control. Therefore this too is likely to yield a dangerously low and inaccurate estimate of needed staffing.

In the summer of 2008 the FAA acted in a way that corroborated NATCA's claims of the invalidity of these staffing ranges by offering significant relocation incentives to controllers to transfer to many facilities throughout the country. These incentives included increases to base pay, bonuses, and relocation payments, and allowed controllers to remain above the new pay bands, contrary to transfer procedure outlined in the imposed work rules. Yet, in every case where such incentives were offered, current controller staffing is *within* or in some cases even *above* the FAA staffing ranges (See Table 1). If FAA's staffing ranges were accepted as valid it would appear as if the Agency is offering lucrative incentives to transfer controllers to well-staffed, even overstaffed, facilities. The truth, however, is that the facilities are indeed severely understaffed.

NATCA fully supports and endorses the language in the FAA Reauthorization Act of 2009 that authorizes a scientific study of the system's air traffic controller staffing to be conducted by an objective third party. This language allows the FAA, Congress and NATCA to truly assess the current risk to the NAS and set benchmarks for resolving the staffing crisis.

¹⁸ Letter from FAA Regional Administrator Christopher R. Blum, Central Region, to Congressman Dennis Moore, February 22, 2006.

¹⁹ Untitled memo from Jodi S. McCarthy, ATO-T Finance, Manager, Workforce Staffing, Received February 28, 2007 on the topic of the Staffing ranges featured in the 2007 Controller Workforce Plan.

Table 1

Facilities with Transfer Incentives Summer 2008 ²⁰				
Facility Name	FAC ID	Total On Board Staffing ²¹	FAA Staffing Range ²²	1998 Authorized
Atlanta TRACON	A80	93	86–105	104
Atlanta ATCT	ATL	50	42–52	55
Chicago TRACON	C90	99	82–100	101
Charlotte ATCT	CLT	79	68–84	74
Cincinnati ATCT	CVG	78	59–73	86
Detroit TRACON	D21	48	47–57	71
Spokane ATCT	GEG	30	23–28	32
Greenbay ATCT	GRB	25	20–24	22
Greer ATCT	GSP	21	16–20	18
Houston TRACON	I90	77	69–85	76
Indianapolis ATCT	IND	43	42–52	56
Los Angeles ATCT	LAX	46	39–47	47
Milwaukee ATCT	MKE	48	38–46	51
New York TRACON	N90	223	176–215	270
O'Hare ATCT	ORD	69	56–68	71
Norfolk ATCT	ORF	42	34–42	UNK
Potomac TRACON	PCT	168	151–185	211
Raleigh ATCT	RDU	44	38–46	48
Roanoke ATCT	ROA	26	20–24	30
South Bend IND	SBN	24	20–24	24
Southern California TRACON	SCT	221	194–237	261
Syracuse ATCT	SYR	22	20–24	30
Tampa ATCT	TPA	70	55–67	67

Within FAA ranges.

Above FAA ranges.

Modernization

NATCA supports the modernization of the NAS, and supports adequate funding in an FAA Reauthorization bill to accelerate the implementation of NextGen. Our support of NextGen is not without conditions, however. Thus far, NATCA, like much of the industry community, has been disappointed by the FAA's lack of clear direction for NextGen plans as well as the FAA's continued exclusion of stakeholders from the planning and implementation of new technologies.

As NATCA's Director of Safety and Technology, Dale Wright, described in greater detail in his March 25, 2009 testimony before this subcommittee, there are several outstanding shortcomings with the FAA's methodology and plans that must be addressed at this early stage of the process.

1. *The FAA must collaborate meaningfully with stakeholders*—The inclusion of NATCA is critical to the success of NextGen and all projects relating to modernization, technology and procedures. The Government Accountability Office and the Inspector General of the Transportation Department have both testified before Congress that controller involvement prevents cost overruns and implementation delays. NATCA must be included in all stages, from inception to implementation.

2. *NowGen must not be neglected as we prepare for NextGen*—The current air traffic control system has fallen into disrepair. Both the human infrastructure (including staffing levels of air traffic controllers, inspectors, engineers, and other aviation safety professionals) and physical infrastructure (such as poorly-maintained and deteriorating air traffic control facilities) need attention in the near term.

3. *Human factors must be addressed*—Several of NextGen's proposals raise serious concerns regarding human factors, including the increased complexity and safety risk inherent in a best-equipped, best-served policy. These issues must be addressed during the development stages in order to avoid delays, cost overruns, and safety failures.

4. *Safety requires redundancy*—NATCA is concerned that the system being proposed by the FAA, which is centralized and lacking a viable backup, is unacceptably vulnerable to attack or natural disaster. Human intervention must not

²⁰ Transfer incentives identified on the FAA career opportunities website <http://jobs.faa.gov/>

²¹ Staffing based on payroll information provided to NATCA by the FAA. Total on-board staffing includes both CPCs and Trainees.

²² Federal Aviation Administration "A Plan for the Future: The Federal Aviation Administration's 10-year Strategy for the Air Traffic Control Workforce 2008–2017."

be the first and only layer of redundancy. The FAA must build redundancy into the system in order to ensure that safety is not compromised in the event of an attack, natural disaster, or technological failure.

NextGen will only be successful if it is done with complete participation and agreement from government, labor and industry groups from development through implementation. By collaborating meaningfully with NATCA from the early stages of the project through implementation, the FAA will be able to identify and address potential issues early on in the process, thereby saving time, money, resources and, most importantly, avoiding unnecessary safety risks. Currently, NATCA has been able to identify several serious concerns with the FAA's NextGen initiatives; many of the plans ignore serious human factors implications while others eliminate redundancy necessary for safety. We believe that if given the opportunity to collaborate meaningfully, NATCA would be able to assist the FAA in addressing these and other issues and mitigating the risks associated with them.

During the late 1990s and into the early part of this decade, NATCA had representatives on over 70 national modernization and procedure development task forces.²³ Working collaboratively through these task forces, we were able to complete more than 7,100 projects to install and integrate new facilities, systems and equipment into the NAS. In addition, more than 10,000 hardware and software upgrades were completed.

Under the Bush Administration, the FAA routinely avoided collaboration with NATCA on key issues and initiatives related to modernization and ultimately terminated the successful Controller Liaison Program, under which controllers provided crucial insight and guidance for the development and implementation of some of the most effective technological and procedural advancements, including: Advanced Technologies and Oceanic Procedures (ATOP), Display System Replacement (DSR), User Request Evaluation Tool (URET), Voice Switching, Control System (VSCS), Reduced Vertical Separation Minimum (DRVSM) and Standard Terminal Automation Replacement System (STARS).

NATCA believes that the success of NextGen is dependent upon this level of NATCA involvement. It is our hope once NATCA and the FAA are able reach a mutually acceptable collective bargaining agreement we can again return to an era of cooperation and collaboration that will best serve the needs of the NAS and the flying public.

Status of Near-Term NextGen Collaboration Efforts: ERAM

One of the earliest NextGen projects to be deployed will be the switch from the Host computer system (Host), which currently serves as the technological backbone of en route air traffic control, to En Route Automation Modernization (ERAM). Host, which was originally deployed in the 1980s, is the mainframe computer processor which provides data to display terminals at en route air traffic control positions. It is expected to become unsustainable within the next 2 years, as the availability of new technology has made replacement parts for older computers harder to find. It is also incapable of handling the satellite-based ADS-B system around which NextGen has been developed. In contrast, ERAM is designed to process data from both radar and satellite sources. Rather than rely on a single processor, ERAM will be a network of computers in which the old Host display terminals will be replaced by individual PC processors. Once it is properly implemented, this distributive processing will allow the system to handle a significantly larger volume of data and provide a more seamless backup system than the one currently in place.

While NATCA supports ERAM as a good concept and necessary for the future of air traffic control, confidence is low in the product in its current state. ERAM testing has yielded more than 40,000 problem reports, over 100 of which are considered to be Initial Operating Capability (IOC) critical, meaning they must be resolved prior to deploying the system for use with live traffic. Earlier this year, officials on the ERAM team disclosed that ERAM had yet to remain stable and functional for a full twenty-four hours of continuous operational testing, and when it was field tested earlier this month, the test failed miserably. Additionally, air traffic controllers have come across significant problems with the human interface of ERAM as they found the new formats cumbersome, confusing, and difficult to navigate.

NATCA is very concerned about the risk to the NAS if ERAM is implemented before these problems are comprehensively addressed. Short-term, piecemeal fixes or workarounds are unacceptable. ERAM must be deployed only when the technology is stable and fully functional because failure of ERAM, particularly during peak

²³ National Air Traffic Controllers Association, 2002 Air Traffic Modernization Tools.

traffic hours, would create extreme confusion and put the safety of the flying public at risk.

This February, the FAA approached NATCA with an invitation seeking our collaboration in the implementation phase of ERAM. At that time, we enthusiastically embraced the opportunity to substantively contribute to finding solutions cooperatively with the FAA. NATCA responded swiftly by submitting comprehensive proposals regarding the terms of our collaboration to the Agency within 9 days of receiving the full ERAM briefing from them. Since then, we have engaged in a constructive negotiations process with the Agency a number of times. Additional negotiations sessions over ERAM are scheduled for May and June. NATCA is committed to continuing to work with the Agency to reach an agreement over ERAM.

NATCA is also looking forward to a change in the Agency's stance on collaborating with our organization. As with all NextGen and modernization efforts, we believe that our expertise would serve the Agency and the flying public well. We remain committed to continuing the effort to reach an agreement with the Agency over the deployment of ERAM.

Airspace Redesign to Alleviate Congestion

In the 1990s, the FAA collaborated with NATCA to address the issue of airspace congestion. Working together, the group identified chokepoints, analyzed weaknesses in the system, and developed a multilateral and comprehensive approach to improving the system. However, during the Bush Administration, the FAA abandoned this collaborative approach and instead chose to unilaterally implement piecemeal changes to air traffic control functions and procedures. Recent events pertaining to airspace redesign for the New York, New Jersey and Philadelphia areas have also shown that the FAA still does not intend to include NATCA in this project, despite significant problems with the roll-out of the redesign's first phase.

Last year, the FAA implemented Phase I of the NY-NJ-PHL airspace redesign effort, which included new dispersal headings for Philadelphia International Airport (PHL) departures that were implemented without input from system users including air traffic controllers. As a result, the new procedures were plagued by serious inadequacies, including a lack of published procedures, incomplete testing, insufficient training for both controllers and pilots, and frequent miscommunication between controllers and pilots.

Now the FAA is ready to begin implementation of Phase II, which will involve the terminalization of airspace currently controlled by Boston Air Route Traffic Control Center (ARTCC) and New York ARTCC. This shift is highly complex and will require changes not only to procedures but also to technology, personnel, facilities and training. Yet it appears that the FAA has not learned its lesson from Phase I and, despite outreach attempts from NATCA, the FAA has refused to collaborate with the frontline controller workforce.

History has shown us that successful modernization efforts require the input and involvement of all stakeholders, and airspace redesign is no exception. NATCA believes that without the collaboration of the air traffic controller workforce in developing and implementing the airspace redesign, the FAA's plans will be expensive, unsafe, inefficient, and unlikely to significantly improve the capacity of the New York area airspace.

This is a belief not limited to air traffic controllers or unions. Jim May, President and CEO of the Air Transport Association (ATA) spoke about the importance of "controller acceptance of implementation and new procedures" at a hearing before the House Transportation and Infrastructure Subcommittee on Aviation. Of airspace redesign, specifically, he said, "you've got to bring Pat [Forrey, President of NATCA] and his guys into the process . . . We can't do New York without his folks."²⁴

With NATCA's help, the FAA may be able to avoid the shortcomings that were present during Phase I of airspace redesign and, by so doing, may be able to transition more smoothly to the new procedures and reduce the risk to the flying public during the transition.

Maintenance of Air Traffic Control Infrastructure

While NATCA supports the upgrade of air traffic control technology, it is imperative that the funding of NextGen not come at the expense of NowGen. During the previous Administration, FAA facilities were allowed to fall into disrepair while the FAA pursued its ill-defined and still-unrealized modernization goals.

²⁴ Jim May, President and CEO, Air Transport Association. Testimony before House Transportation and Infrastructure Committee, Subcommittee on Aviation. March 18, 2008 hearing on "ATC Modernization and NextGen: Near-Term Achievable Goals."

According to a recent report by the Department of Transportation Inspector General, 59 percent of FAA facilities are beyond their 30-year design life. All En Route Centers are over 40 years old and falling into disrepair. Certain terminal facilities are also falling into unacceptable levels of disrepair—putting the health and safety of FAA employees at risk. For example, inspectors have confirmed the presence at Detroit Metropolitan Airport Tower and TRACON of stachybotrys, a toxic form of mold believed to be a contributory factor in health problems experienced by controllers at the facility (including cases of occupational asthma as well as seven cancer diagnoses during the past 6 years.)

This level of deterioration is unacceptable. The FAA must repair and maintain existing air traffic control facilities in a manner that ensures the safety and security of FAA personnel and allows aviation safety professionals the tools they need to do their jobs to the high standard of excellence we expect and depend on.

Conclusion

NATCA urges swift passage of an FAA Reauthorization bill in order to ensure the short and long-term health, growth, safety and efficiency of the National Airspace System.

In NextGen, the FAA has undertaken a large-scale and long-term research and development project to overhaul the technological infrastructure of the air traffic control system. This ambitious undertaking has serious implications for the future of the National Airspace System and should therefore include the meaningful participation of all NAS stakeholders, most notably NATCA. Collaboration with NATCA by the FAA is predicated on the resolution of our current contract dispute as well as a fix to the collective bargaining process to ensure fairness in future negotiations.

NATCA supports the FAA's modernization efforts and is eager to be a part of the team developing and planning the technology that will bring us into the next generation of air traffic control. We look forward to working with the FAA to help them address the serious outstanding issues including human factors, equipment and redundancy concerns. It is essential for us to be included as partners in this ongoing modernization effort.

Senator DORGAN. Mr. Forrey, thank you very much.

Next, we'll hear from Captain John Prater. I hope I'm pronouncing that correctly. Captain John Prater, the President of the Air Line Pilots Association.

Captain Prater, welcome.

STATEMENT OF CAPTAIN JOHN PRATER, PRESIDENT, AIR LINE PILOTS ASSOCIATION, INTERNATIONAL

Captain PRATER. Good afternoon, Mr. Chairman, Subcommittee Members.

I cannot start my remarks without thanking the Chairman for his opening remarks. You will have the full assistance and support of the Air Line Pilots Association to peel back any of the investigations required to get down into the causes and the ways that we can improve the safety of our industry, whether that's training of pilots, whether it's selection of pilots, experience or weather factors. We would look forward to joining you in that effort.

That's where we begin today with the FAA Reauthorization Act. It holds the potential to make significant strides in advancing aviation safety and to herald a new era for U.S. air transportation.

I will outline six priority safety and policy areas for the Air Line Pilots Association International. Several were covered in last Congress's Reauthorization Bill. However, a number of our most critical concerns remain unaddressed.

First. No industry was hit harder by the 9/11 attacks than the U.S. airlines. To keep our companies in business, our members took enormous concessions, exacerbated by scores of airline bankruptcies. As a result, our members often fly right up to the current regulatory limits for flight and duty time. Sixteen-hour domestic

duty days and longer in international flying are a fact of life for today's airline pilots. Irregular shift work, multiple time zones, all-night operations and disrupted Circadian rhythms all contribute to pilot fatigue.

ALPA advocates for a complete overhaul of the regulations based upon modern fatigue science. The rules must apply to all sizes of both passengers and cargo operations. The regulations must encompass adequate rest periods, reasonable duty periods, and provisions for crossing multiple time zones and flying on the back side of the clock.

ALPA strongly supports the bill's language that directs the FAA to commission a National Academy of Sciences study to collect new data on pilot fatigue and then to use it to update these critical safety regulations.

Second. Fostering a safe air transportation system also requires a foundation of voluntary, non-punitive safety reporting programs.

These programs must be based on the unshakeable sense of trust among the participants. Most reports are sole source, meaning that the only person or crew reporting it knew that a mistake had occurred. Without the full confidence that reporting an error will be used solely to advance safety, employees will have little incentive to come forward and valuable safety data will be lost.

Moreover, safety management systems, as outlined in the ICAO Programs, will be stymied without these reporting programs.

ASAP Programs have been suspended because of misused reports. We ask Congress to protect these safety programs against further misuse.

Third. Few would deny the need to modernize the Nation's air space. Infrastructure equipment and facilities are severely outdated. Modernization is a complex, expensive and long-term endeavor that must be done right this time. Long-term stable funding is essential.

Airlines currently pay the majority of costs for operating the National Air Space System. All users will benefit from a safety modern system. All should bear a fair share of the cost.

A related air space management concern for pilots is unmanned aerial systems. Regulations must be in place to ensure safety before these unmanned air vehicles can share the air space with loaded airliners.

ALPA strongly supports provisions in the bill to enhance runway safety, to research weight turbulence and other weather phenomena on airline operations, including icing. We must continue to operate both Midway and Wake Island Airfields as TransPacific emergency landing options. Research to reduce the hazards of volcanic ash and wildlife encounters also warrants additional funding support.

Fourth. Many cargo aircraft currently operate without flight deck doors to separate pilots from personnel, such as animal handlers and couriers who should not have access to the cockpit during flight.

All FAR Part 121 operations must be held to one standard of safety and security. We call on Congress to ensure that cargo aircraft are equipped with reinforced flight deck doors or an equivalent level of protection.

Fifth. ALPA also strongly believes that U.S. citizens must control key operational aspects of U.S. airlines. We urge the Subcommittee to reiterate the control requirements by identifying fleet composition, route selection, pricing, and labor relations as among the operational elements that the Department of Transportation must ensure that U.S. citizens control.

Finally. While safety decisions must never be based on economics, our industry's financial health is extremely important to pilots.

Large price spikes and jet fuel scarcity pose a tremendous threat. ALPA urges Congress to adopt a national energy policy that will stabilize jet fuel supply, reduce oil investor speculation, and hold the line on new fuel taxes, charges or fees on an already overtax industry.

This FAA Reauthorization Bill holds promise for powerful change. As the professionals who make the airline system work day in and day out, 365 days a year, we urge and respectfully so urge Congress to act swiftly to pass this legislation.

On behalf of our 54,000 air line pilot members, we thank you for the opportunity to share our concerns.

[The prepared statement of Captain Prater follows:]

PREPARED STATEMENT OF CAPTAIN JOHN PRATER, PRESIDENT,
AIR LINE PILOTS ASSOCIATION, INTERNATIONAL

Good afternoon, Mr. Chairman and members of the Subcommittee. I am Captain John Prater, President of the Air Line Pilots Association, International (ALPA). ALPA represents more than 54,000 pilots who fly for 36 passenger and all-cargo airlines in the United States and Canada. On behalf of our members, I want to thank you for the opportunity to provide our perspectives on the FAA reauthorization bill. We provided input during the 110th Congress on S. 1300, and supported its passage, as it included funding for many aviation programs and enhancements that are important to airline pilots.

Recognizing that there have been some changes to the Subcommittee since the last Congress, our comments are intended to not only identify those provisions from S. 1300 that are of special interest to us, but also explain why they are important.

Flight Crew Fatigue and Flight-Time/Duty-Time Rules

One of the many hardships that the post-9/11 era brought to airline flying was pilots flying right up to the FAA regulatory limit. This has resulted in adverse safety impacts, fatigue, and more stress. The pay and productivity hits of the last few years mean that our members are routinely working at or near regulatory limits as a normal operating practice. Sixteen-hour domestic duty days—even longer with some long-range international operations—are facts of life for many airline pilots. Irregular shifts, crossing time zones, all-night operations, FAR Part 91 flying at the end of a duty day, and significant circadian rhythm challenges all contribute to pilot fatigue. Remember, too, that the current regulatory requirement of 8 hours of rest after a 16-hour day has to include travel to and from a hotel, meals, and sleep. So when we see a requirement for 8 hours of rest required for a pilot to operate a flight that translates into only a 4 or 5 hour window available for sleep.

Technological advances have exacerbated the problem of pilot fatigue. The current prescriptive regulations regarding maximum flight time and duty periods have not been significantly changed since well before jet transports came into commercial use in the late 1950s. Some airliners being operated now can fly for more than 20 hours without refueling. With flights of this duration, combating flight crew fatigue is a real and constant concern.

The National Transportation Safety Board (NTSB) lists as one of its “most wanted” aviation safety improvements reducing the potential for accidents and incidents caused by human fatigue. Although the FAA issued a notice of proposed rulemaking in December 1995 to update the flight and duty regulations for airline pilots, in the intervening 14 years, the regulations have not been revised. Last summer, the FAA held a conference on the subject of fatigue, at which hundreds of government and industry personnel convened to discuss the need for creating new flight and duty requirements, which will protect against fatigue-related accidents and incidents.

The agency has stated that it is interested in developing fatigue risk management systems (FRMS) to provide an alternative to prescriptive limitations, and last year it issued Operations Specifications for ultra-long range (ULR) operations (*i.e.*, those in excess of 16 hours of flight time). Several ULR carriers subsequently sued the FAA to block implementation of these operations specifications, however, and the agency withdrew the specifications which has further complicated efforts to address fatigue.

To address the problem of pilot fatigue, ALPA advocates for adequate rest periods, reasonable duty periods and special provisions for flying “backside of the clock” and for crossing multiple time zones. Any regulations developed to deal with fatigue should be based on modern scientific principles, and should apply to all sizes of aircraft engaged in domestic and international passenger and cargo operations. Fatigue risk management systems should complement, and not be used as a substitute for an overdue, comprehensive updating of the FAA’s flight and duty time regulations. Regulatory reform must also close loopholes currently in the rules applicable to air carriers operating under FAR Part 121. Some of our smaller carriers, for example, are currently allowed to use the less restrictive rules in FAR Part 135, even though they are carrying ticketed airline passengers in scheduled service—passengers who deserve the same high “One Level of Safety” that must be the hallmark of the airline industry.

ALPA strongly supports Section 507 of S. 1300 which would direct FAA to: (1) arrange for a study by the National Academy of Sciences on pilot fatigue to include an examination of recommendations made by the NTSB and the National Aeronautics and Space Administration (NASA) on this subject; and (2) provide recommendations with respect to the FAA’s flight and duty regulations based on the study’s findings. We suggest some minor clarifications to reiterate the urgency of the problem and build on the progress made in the last year.

We note, however, a significant omission in the draft legislative language. Currently, airline pilots may be required to operate transport aircraft for extended periods under FAR Part 91 after a long duty day of Part 121 or 135 flying. We strongly support inclusion of language which would require that FAR Part 91, or “tail-end ferry” flying by airline pilots be included in the regulatory calculation of flight and duty time.

Air Carrier Citizenship

ALPA would also like to reaffirm our support for the addition of language providing for specific air carrier citizenship requirements.

We feel it is important for Congress, through this legislation, to affirm that U.S. citizens must be in firm control of all the key operational aspects of U.S. air carriers. Language to accomplish that should specifically identify marketing, branding, fleet composition, route selection, pricing and labor relations as some of the operational elements that DOT must ensure are controlled by U.S. citizens. This affirmation is consistent with the longstanding U.S. citizenship requirements of the aviation statutes.

Inclusion of such provisions would help ensure that as U.S. airlines seek to enter into ever closer alliance relationships with foreign carriers that there are clear limits on how far those relationships can go. The latest generation of joint ventures, under which U.S. and foreign carriers share revenues so that they are indifferent as to which airlines or pilots actually fly the aircraft, increases the importance of making sure that decisions that have a direct effect on the number of U.S. employees will be required for the joint services. It is essential that U.S. carriers not become subordinate components of foreign carrier networks but retain the incentive to develop and take advantage of growth opportunities that will benefit their own employees. This is particularly important at a time when the creation of high quality jobs for U.S. workers is a leading objective of the national economic and social policy.

Protection of Voluntarily Provided Safety Data

We urge the Senate to take advantage of the opportunity presented during the reauthorization of the FAA to make significant improvements in proven, valuable safety reporting programs. Last year’s bill was silent with respect to providing protection against the misuse of safety data provided voluntarily by those employees in positions to see the entire breadth and scope of aviation operations. Such protections are a key element in improving upon the already enviable safety record of commercial aviation in the United States.

Voluntary, non-punitive safety reporting programs have proven to be an invaluable source of safety information. The most familiar examples of these programs are the Aviation Safety Action Program (ASAP) and the Flight Operations Quality As-

surance program (FOQA). These programs, especially ASAP, rely on a sound foundation of trust between three parties—the airline, the regulator, and the employee group concerned. The trust on which these programs are based needs to be embodied in a strong guarantee that when issues arise, personalities change or interpretations are made; parties to the agreement have a fundamental guarantee that their efforts to improve safety will not be met with punishment.

Pilots, flight attendants, controllers, mechanics, and other aviation professionals are on the front lines of daily operations and need to be able to report safety hazards they observe without fear of certificate action by the regulator, discipline by the company, or action in civil litigation. Pilots have a professional interest in identifying and correcting safety deficiencies and they must not be hindered from doing so. Pilots are also willing to identify and discuss the underlying causes of their own errors so that they and their peers can learn from them, but need assurance that their forthrightness will not result in punishment. In a very large percentage of cases, information obtained by ASAP reports cannot be obtained any other way. That is, no one but the reporter is aware of the problem identified. Jeopardizing the full, free and open reporting of safety concerns by these “sole source” reporters would represent an unrecoverable loss of a significant portion of available safety data.

ASAP fosters a voluntary, cooperative, non-punitive environment, and a positive safety culture for the open reporting of safety of flight concerns. Through such reporting, all parties have access to valuable safety information that may not otherwise be obtainable. This information is analyzed to develop corrective actions aimed at solving safety issues and possibly eliminating deviations from Federal Aviation Regulations.

FOQA collects and analyzes large amounts of flight data generated during normal line operations. These data provide great insight into the total flight operations environment and have proven valuable in identifying trends that may indicate potential hazards. The information and insights provided by FOQA data, particularly when large quantities of such data are combined, can improve safety by significantly enhancing training effectiveness, operational procedures, maintenance and engineering procedures, and air traffic control procedures. While not “provided” directly by flight crews as a report, these data must nevertheless be protected from misuse for disciplinary or other punitive purposes.

Legislation is necessary to provide guaranteed protection from misuse of voluntarily supplied safety information. Programs have been suspended over misuse of reports for purposes of discipline or litigation. When the FAA, an air carrier and its employees agree on effective corrective action for voluntarily reported problems, the completion of the agreed upon corrective action should be conclusive and employees should not be subject to additional disciplinary action. Legislative protections must extend to actions by the regulator, the employer, and use in litigation. Failure to provide such protection will undoubtedly result in a significant reduction in the amount and quality of safety data that can be obtained.

Quality safety data from pilots and other aviation workers is an essential factor in meeting the requirements for implementation of Safety Management Systems (SMS). An SMS is a systematic approach to managing safety and includes the necessary organizational structures, accountabilities, policies, and procedures. The International Civil Aviation Organization (ICAO) established a deadline of January 1, 2009, for States’ airlines, airports and service providers to implement SMS—a deadline that the FAA declared last year that it would not meet. However, the FAA is working to establish SMS standards and regulatory guidance through an Aviation Rulemaking Committee (ARC) with the goal of meeting it in the future. A properly structured and implemented SMS will provide not only a safer operation for employees and customers, but should also eventually save money through improved efficiencies. The FAA must continue its efforts to develop SMS guidance and training materials to meet the ICAO standard. They must also provide training to their own workforce and safety inspectors to ensure correct implementation and oversight of this new way to manage safety.

National Airspace System Modernization

Long-term, stable funding of the Nation’s airspace and air traffic control (ATC) infrastructure is essential for safety, capacity and efficiency gains that are needed to modernize the aviation system. The project will take a long time; it is complicated, expensive, and absolutely must be done right the first time. ALPA believes that funding must be comprised of both Federal funds and an equitable funding stream from all airspace users since all users will benefit from modernization. All users should pay their fair share. Right now, airlines pay the majority of costs for operating the National Airspace System (NAS). Reducing the tax burden on our em-

ployers would help our industry recover. All users will reap the benefits and all should bear a share of the cost.

There is little debate over the need to modernize the Nation's airspace system. The current U.S. ATC infrastructure is outdated, the equipment's capabilities are limited, facilities must be modernized, and efficiency is decreasing. The delays and similar problems in the system that currently plague the ATC system clearly underscore the critical need for ongoing NAS modernization. The key to improving efficiency, reducing delays and most importantly, avoiding potential hazards of using outdated equipment, is the ability to finish that which we start. That requires sustained, committed resources supported by funding that is not diverted, curtailed, or denied. The entire country will benefit from the airlines' return to economic solvency if capacity and efficiency can be improved. New technologies and procedures can also increase safety, particularly in areas not well served by the current infrastructure. However, in many cases we are developing ways to put more airplanes in the same amount of space, so any new procedures must be studied, modeled, and thoroughly evaluated to guarantee that the current high level of safety is maintained or improved.

The FAA will realize the first benefits from NAS modernization; airspace users may not reap the benefits of installing new aircraft avionics for many years despite the fact that the equipage is necessary to build the foundation for the future. We urge Congress to work with the industry on the development of an appropriate NextGen airspace management system funding mechanism.

Unmanned Aircraft Systems

The much-publicized success of Unmanned Aircraft Systems (UAS) in combat operations has created a large potential market for the use of these aircraft by commercial enterprises. Many are also in domestic use by government agencies (*e.g.*, Law Enforcement, Customs, Agriculture, etc). As the number of these aircraft increases, and the potential for business use also increases, so does pressure to allow their unrestricted operation in the NAS.

ALPA believes that the language in Section 607 of S. 1300 accurately describes the depth and breadth of the study needed to evaluate this paradigm shift in the character of the NAS. The timeline set out in the bill to develop a plan may be sound, but we do not believe the actual process of UAS integration can be undertaken on a fixed timeline. A plan for integration must include a study of hazards and mitigation methods that must be taken to conclusion—however long that takes. In addition, we believe that the goal of this section should not be limited to the safety of the UAS vehicles themselves, but rather it must explicitly include the safety of all users of the National Airspace System and persons and property on the ground. Before UAS can be authorized to occupy the same airspace as airlines, or operate in areas where UAS might inadvertently stray into airspace used by commercial flights, there needs to be in place a standard or combination of standards that will ensure the same high level of safety as is currently present in the NAS. In order to guarantee that high level of safety, extensive study of all potential hazards and ways to mitigate those hazards must be undertaken.

The extreme variation of UAS types—which range in size from as small as a bird to as large as a Boeing 737—makes this a complex issue. So, too, does the fact that they are flown remotely from operational centers or control stations which may be located at the launch-and-recovery site or thousands of miles away. Some are capable of “autonomous operation,” meaning that they follow pre-programmed instructions without direct operator control. The pilots of autonomous operation UAS are not presently required to hold any FAA license. Most of the current designs were developed for the Department of Defense (DoD) for use in combat areas and so are not necessarily designed, built, maintained or operated in the same manner as other aircraft in the NAS. As a result, they are typically flown today in segregated airspace, *i.e.*, military restricted airspace or its equivalent.

ALPA believes that a well-trained and well-qualified pilot is the most important safety component of the commercial aviation system. The role of the pilot is a major area of concern within the UAS and piloted aircraft communities. These pilots should be trained, qualified, and monitored to the same standards as pilots that operate aircraft from within the aircraft. The equipment they fly must be designed, built, and maintained to the same high standards as those operated by other commercial users of the airspace. ALPA will continue to work to protect the safety and integrity of the NAS and ensure that the introduction of UAS operations will not compromise the safety of our members, passengers, cargo or the public at large.

National Energy Policy and Alternative Fuel Research

There is currently no greater threat to the long-term health of the airline industry than the ongoing potential for large price escalations and scarcity of jet fuel. Jet fuel is the “lifeblood” of the airline industry and it must be in abundant supply and reasonably priced in order for commercial aviation to survive.

Despite the airline industry’s best efforts to take advantage of every opportunity to improve efficiencies through technology and operational improvements to conserve fuel, jet fuel expenses have become the airlines’ largest operating expense and consume as much as 40 percent of every revenue dollar, up from 15 percent in 2000. As the result of the exorbitant jet fuel price increases this past summer, many thousands of airline workers including pilots were furloughed and the economic fallout from those increases, combined with other economic woes, is worsening still.

U.S. airlines consumed about 430 million barrels of jet fuel in 2008.¹ Although that is a huge amount of fuel, it represents only about 8 percent of total fuel used by all transportation modes in the country (96 percent of which is petroleum-based) and only 2 percent of all fuel of all types used in the U.S.² Other sources of the Nation’s fuel include natural gas, coal, renewals, and nuclear power. Some industries that currently use petroleum, such as electric power utilities, could convert to coal, nuclear power or renewable sources, thereby making more petroleum available to the transportation industry which relies so heavily on oil-based fuel.

Because jet fuel consumption represents a small portion of the country’s total energy needs, it is impossible to significantly increase its supply, and thereby decrease its price, in the foreseeable future without: (1) increasing oil production (whether domestically, abroad, or both), (2) decreasing the amounts of oil used by non-aviation entities by their switching to alternative energy source(s) in order to make more of it available to aviation, or (3) both.

ALPA was at the center of industry activity that began in early 2008 to urge Congress to reform oil commodities trading practices to reduce the effects of rampant speculation. Regardless of what may happen to the price of oil in the near future as a result of speculation reform or other short-term legislative remedies, the reality is that the U.S. does not have a comprehensive national energy policy. Without the creation and implementation of a national energy policy which will increase the supply and decrease the price of jet fuel, the future of U.S. airlines will continue to be precarious. At present, pilots can merely hope that the price of jet fuel will be so priced that their carriers can remain in business.

ALPA urges Congress to adopt a national energy policy which will include the goals of making jet fuel available and affordable into the future. Such a policy should include the following principles:

1. Regulate oil commodities trading to eliminate loopholes, increase transparency, and reduce the potential for rampant investor speculation that may lead to artificially higher prices;
2. Prohibit any new taxes, charges, or fees on fuel used by airline operations;
3. Encourage the development of new technologies and operational concepts that reduce transportation energy consumption and minimize environmental impacts;
4. Increase domestic production of energy sources focusing on clean energy and environmentally responsible oil production;
5. Promote greater use of non-oil-based energy sources within the aviation industry and transportation modes that can use alternative types of energy; and
6. Provide government-funded research and development of a low-cost, renewable, low- or non-emitting alternative fuel(s) for use by commercial aviation and other transportation modes.

We are pleased that Section 602 of S. 1300 included provisions for alternative fuel research and we strongly encourage that those provisions be retained in the final FAA reauthorization bill.

Flight Deck Doors for All-Cargo Aircraft

Following the events of September 11, 2001, Congress mandated that fortified flight deck doors replace existing barriers on certain commercial aircraft types. Subsequently, the Department of Transportation (DOT) Rapid Response Team (RRT) identified a need to “. . . conduct a retrofit of the entire U.S. fleet of aircraft.” The reinforced door has since proven to be a valuable enhancement to flight deck secu-

¹ Source: Air Transport Association.

² Source: U.S. Department of Energy.

ality, and the DOT has determined that all-cargo aircraft are “*equally vulnerable*.” The Transportation Security Administration (TSA) has publicly stated that hijacking poses the greatest threat to the all-cargo domain.

In the unique all-cargo environment, many aircraft, including wide-body designs, operate with no flight deck doors at all. Flight deck doors are not required equipment on newly manufactured cargo aircraft. Flight crewmembers of all-cargo aircraft are not supported by cabin attendants or air marshals, and are not afforded the possibility of passenger intervention. It is a little known fact that all-cargo airliners frequently carry additional, non-crew personnel, such as couriers and animal handlers. It is potentially easier for an intruder to gain access to a cargo aircraft due to limited ground security procedures. These vulnerabilities can be readily exploited by terrorists or other persons with malicious intent.

In November 2005, ALPA responded to a DOT/FAA Notice of Proposed Rulemaking (NPRM) regarding crewmember monitoring of the area outside the flight deck door. Language proposed for inclusion in FAR Parts 121.313(k) and 121.582 specifically *excluded* all-cargo operations. As stated at that time, given that the same threat existing for passenger-only operations also exists for aircraft involved in all-cargo operations, ALPA continues to believe that *all* aircraft operating under FAR Part 121 must be afforded the same standard of safety and security protection. As such, all-cargo aircraft should be equipped with reinforced flight deck doors or provided an equivalent level of protection. Use of equipment that is a secondary barrier on a passenger aircraft might well provide needed additional security if used as the only barrier on an all-cargo aircraft.

Wildlife Hazards

The recent airline accident in New York City which necessitated a ditching in the Hudson River has been attributed to the aircraft striking geese while in flight which resulted in a loss of power in both engines. The potential for bird strikes is a risk that is far from new; the Wright brothers recorded the first bird strike in 1905. The first bird strike-related fatality occurred in 1912 when aviation pioneer Cal Rodgers collided with a gull which became jammed in his aircraft’s controls and caused it to crash. Striking large birds at high speeds may result in catastrophic damage to an engine, airframe, or pilot’s windshield. Even a “small” bird of four pounds struck by an aircraft traveling 250 knots (288 mph) delivers the force of approximately 38,000 pounds at the point of impact.³

It is impossible to completely prevent birds from being struck by aircraft, so efforts have focused for many years on reducing the possibility of a strike and the severity of the consequences. Airframe and engine manufacturers have made great strides in designing aircraft structures, including windshields and engines that are able to withstand the force that results from striking and ingesting most birds. Engine design standards were updated in 2004 to require that engines be capable of ingesting up to an 8-pound bird depending on the engine’s inlet size. Engines must also demonstrate the ability to withstand some level of damage and continue to operate. Windshields and windows must be tested to withstand a 4-pound bird strike. In 2007, new requirements addressed flocking birds and bird weight variability. ALPA was part of the team developing these standards. Obviously, however, aircraft cannot be made impervious to the effects of bird strikes, especially when all engines are impacted. Control of the wildlife population is also a critical part of the solution. The Federal Aviation Administration (FAA) requires commercial service airports to conduct wildlife hazard assessments and implement a wildlife hazard management plan, if warranted. Airport operators scare birds and wildlife away from aircraft operating areas using such measures as air guns, lasers, and wildlife patrols, and they use fencing and extermination to reduce the threat posed by large mammals such as deer. We urge Congress to ensure that sufficient funds are available for wildlife hazard mitigation research.

Runway Safety

We have previously testified on the vitally important subject of runway safety. We urge Congress to continue to promote FAA leadership and industry efforts to mitigate the risks of runway incursions, excursions, and confusion. Congress can greatly facilitate this undertaking by ensuring that appropriate funding is available for a long-term modernization effort targeting those communications, navigation, and surveillance systems which directly impact runway safety.

Many aviation industry partners collaborated with the FAA on ways to improve runway safety following its “Call to Action on Runway Safety” in August 2007. ALPA is doing its part by engaging in activities focused on a heightened awareness

³Source: Transport Canada.

of runway and airport safety. For example, we have published a series of runway safety newsletters for our membership since January 2008. Additionally, working in conjunction with AOPA, we provided our membership with an interactive runway safety website designed to inform pilots of best practices to increase their vigilance and operational safety during airport surface movements. In fact, we have made runway safety information available to non-ALPA members and the international community. In spite of the efforts of all industry stakeholders, however, runway safety concerns remain. To its credit, the FAA established a new Runway Safety Council (RSC) and its subgroup, the Root Cause Analysis Team (RCAT) in late 2008. ALPA co-chairs the RSC, whose mission is to provide government and industry leadership to develop and focus implementation on an integrated, data-driven strategy to reduce the number and severity of runway incursions. ALPA applauds the increased focus and attention being paid to runway incursions and we are optimistic that safety will benefit as a result.

We support language in S. 1300 which would require the FAA to develop a strategic runway safety plan and implement a runway safety alerting system. In addition to runway incursions, we are also focused on reducing the risk from runway excursions.

ALPA's white paper on *Runway Incursions*, published in March 2007, proposed that the U.S. Government and aviation industry fulfill the commitments that were made to implement the recommendations of the Commercial Aviation Safety Team (CAST) Runway Incursion Joint Safety Implementation Team. CAST determined that 95 percent of all runway incursions could be prevented with the appropriate mix of technologies. ALPA encourages government and industry action to implement the CAST recommendations. ALPA's position on the issue of runway safety is articulated in greater detail in previous Congressional testimony.

Airport Rescue and Fire Fighting

ALPA supports the inclusion of language that would prompt a review of existing requirements to provide fire fighting services at airports. This represents an excellent opportunity to correct a critical safety deficiency that exists at a number of airports served by airline aircraft. Current law and FAA regulations allow airports serving airlines involved in all-cargo operations to reduce, and in some cases even eliminate, firefighting capability on the airport while those all-cargo flights are operating. This means that the crews, other occupants and contents of these all-cargo aircraft are at considerably increased risk in the event of an on-board fire. We urge the Congress to ensure that the review of airport fire fighting standards include a requirement to correct this discrepancy and provide the same level of safety for cargo operations as is available to passenger airlines.

Pacific Island Airfields

Funding for the continued operation of Wake Island and Midway Island airfields is important to both the financial health of our industry and the safe operation of trans-Pacific flights. Long, over-water commercial flights should always be conducted using routes that allow diversion to a suitable landing area in the event of an engine failure or similar emergency. Without these airports available as alternates in the event of an in-flight emergency, trans-Pacific flights will be required to use longer, less efficient routes. We are pleased to see support for sustaining the operation of these and other similar airfields and urge the Congress to maintain this position.

Aviation Research

As we move to modernize the Nation's air transportation system, many of the emerging procedures for capacity enhancement must be supported by sound research efforts to ensure that the U.S.'s enviable level of safety is maintained. As more and more precise navigation capability allows us to put aircraft closer together without increasing collision risk, we must nevertheless be mindful of the fact that there is much to be learned about the nature of wake vortices and the effect of wake turbulence both in the terminal and en route realms of operations.

We are encouraged by the level of support shown by the Congress in identifying the need for research into wake turbulence effects as well as the impact on operations of weather such as icing. We urge the inclusion of research into the impact of volcanic ash on operations as well. In addition, phenomena under study in these efforts must not only be studied to determine their operational impact, but methods must be developed to describe the location and effects of such phenomena. This information must be relayed in terms that are operationally relevant and can be transmitted to flight crews and dispatchers in a timely manner to support improved safety decisionmaking.

Airman Certificate Denial

Section 503 of S. 1300 would give the FAA a right to challenge the NTSB's decision to grant an application for an airman, including medical, certificate in the U.S. Court of Appeals. Under existing law, § 44703(d) of Title 49, the NTSB may review the FAA's denial of an application for the issuance or renewal of an airman, including medical, certificate. If the NTSB finds the airman qualified, the NTSB's decision is binding on the FAA and the law provides that the FAA shall issue the certificate.

Currently, only the airman has a right of further appeal from the NTSB. It should be noted that in 1992, the FAA was given a right to appeal NTSB orders issued under § 44709 (*i.e.*, suspensions or revocations of existing certificates) per P.L. 102-345. Section 503, would be an expansion of government power with no apparent safety benefit.

Because the FAA has the right under Section 609 of the Federal Aviation Act of 1958 (49 U.S.C. § 44709(a)) to reexamine any certificated airman "at any time," the expansion of power sought by proposed section 503 is simply not necessary for public safety. So long as the reexamination power is appropriately used, the FAA may in its discretion reexamine "at any time" the medical or other qualifications of an airman issued a certificate under 49 U.S.C. § 44703, even after the statutory NTSB review currently permitted by § 44703(d) is completed. This perpetual right of reexamination gives the agency a right not available to an airman and the safety check it needs for the public interest.

Consider, for example, the approval processes used for an FAA medical certificate. An airline pilot must have an FAA aviation physical examination and obtain a new FAA medical certificate each 6 months (in most cases). Currently an airman completes a paper FAA medical application form and undergoes a physical examination by an FAA-designated aviation medical examiner (usually a physician). The FAA-designated medical examiner reviews the application, the applicant's medical history and conducts a physical examination of the applicant. The medical examiner then makes a decision to grant, deny (or defer to the FAA) the decision to issue a current FAA medical certificate. The medical examiner then forwards to the FAA the record of his medical decision (with supporting documentation).

The FAA reviews the decision of the medical examiner and makes an agency decision to grant or deny the medical certificate. (This is the first level of governmental review. In case the agency reverses the decision of the medical examiner, the airman must surrender the certificate.) Historically, further review of this FAA first-level decision was internal to the FAA itself. Because of past concerns about bias within the FAA, airmen petitioned Congress for relief and a process was provided some years ago under § 44703(d) to provide that appeals of FAA decisions denying a certificate were to be made to an independent agency with industry expertise; Congress selected the NTSB.

Now, if the FAA denies the certificate at the first level of review, the airman has a right of appeal of the certificate denial to the NTSB. After a petition for review of the FAA's decision to deny a certificate is filed with the NTSB, a hearing on the record is scheduled and held before an NTSB Administrative Law Judge (ALJ). The ALJ conducts a full hearing on the record (usually in a Federal courthouse) with testimony and exhibits, and a full opportunity for argument and cross-examination. At the conclusion of the hearing, the ALJ issues an initial decision. (The second level of governmental review). If either the FAA or the airman disagrees with the ALJ's initial decision, a further appeal may be taken to the full five-member National Transportation Safety Board. (The third level of governmental review).

(We have used the example of the FAA medical certificate thus far, but a similar procedure is applicable to the FAA's denial of pilot certificates and ratings, many of which may have been initially issued by designated pilot examiners who are not FAA employees. Again, Congress selected the NTSB for this further review because of its industry expertise.)

The five members of the NTSB (or as many members as may be seated if there are vacancies) review the record of hearing and the ALJ initial decision and issue a decision that is binding upon the parties, with one basic exception. The airman as an affected citizen is permitted to appeal an adverse Board's decision as a final agency order subject to the typical grounds that the government's (here the NTSB's) final decision was not in issued compliance with the Administrative Procedure Act or was otherwise contrary to law. The FAA has no such statutory rights.

The FAA now seeks a right to appeal its sister agency's final orders under the proposed section 503. ALPA does not believe that giving the FAA the requested power would be good government or a correct policy position. ALPA believes the FAA does not need any further review here because it's perpetual right of reexamination of certificated airmen under § 44709(a) satisfies the public safety interest in the (apparently hypothetical) event that the NTSB's opinion may differ in a future

case from that of the FAA. Were the authority sought by the FAA to seek judicial review its sister agency's (the NTSB's) decision granted, it will essentially make the hapless airman a party in a fourth (fifth if you count the original designee's decision) level of governmental review where the essential appellate dispute is really between the differing opinions of two governmental agencies—the NTSB and the FAA.

This amount of government review is excessive to an ordinary citizen. It would risk effectively overwhelming any rational cost or timeliness considerations when the resources of ordinary individuals are pitted against abilities of Federal agencies to essentially litigate these simple individual certificate denial decisions indefinitely. In sum, the existing process is burdensome enough—adding additional levels of review proposed by the FAA risks making the process so burdensome that any effective right of review may be denied altogether.

Accordingly, ALPA opposes Section 503 of S. 1300 for the following reasons:

- Current law already provides an acceptable and safe decision mechanism and appeal procedure, with a final decision made by a government board with expertise in the field;
- There has been no demonstration or other showing that the current procedures under § 44703(d) are inadequate or that there is any real or substantive risk to public safety under these procedures. Imposing an additional level of Court review without showing a need to change the existing procedures will simply increase the burden and complexity of the medical and airman certificate application processes without any benefit to the public, air safety or the government. A system that would require an individual airman to defend an NTSB decision in his favor in Federal Court after he or she has already defended his or her application for a certificate through two appellate levels of government administrative review is unduly onerous and burdensome upon both the applicant and taxpayers who would be responsible for funding both the cost of the FAA's appeal and the judicial resources necessary for review.

Human Intervention and Motivation Study (HIMS) Program

The Human Intervention and Motivation Study is a vital program that helps flight crewmembers operate in as safe a manner as possible. It has been an extremely successful program since its inception in 1974, and we are pleased that Section 702 was included in S. 1300. It is funded through Fiscal Year 2009 and needs to be reauthorized for Fiscal Years 2010 through 2013.

Finally, I want to express ALPA's appreciation for this Committee's commitment to moving a reauthorization bill as expeditiously as possible this year. As has been discussed at length today, passing a long-term, comprehensive bill to reauthorize the activities of the FAA, to upgrade airports and modernize the NAS, and to improve aviation safety is critical not only to pilots and the aviation industry but to the entire nation and our national economy. Thank you for the opportunity to testify today. I would be pleased to address any questions that you may have.

Senator DORGAN. Captain Prater, thank you very much.

Next, we will hear from Mr. Robert Roach, Jr., General Vice President of the Transportation International Association of Machinists and Aerospace Workers.

Mr. Roach, you may proceed.

STATEMENT OF ROBERT ROACH, JR., GENERAL VICE PRESIDENT, INTERNATIONAL ASSOCIATION OF MACHINISTS AND AEROSPACE WORKERS

Mr. ROACH. Thank you, Mr. Chairman, and Members of this Subcommittee, for the opportunity to speak to you today.

My name is Robert Roach, Jr., General Vice President—Transportation, for the International Association of Machinists and Aerospace Workers, and I'm appearing at the request of International President, R. Thomas Buffenbarger.

The Machinists Union is the largest airline union in North America. We represent more than 100,000 U.S. airline workers in almost every classification, including flight attendants, ramp service workers, mechanics, and public contact employees.

On behalf of those workers who ensure the United States has a safe, secure and reliable air transportation system, I am presenting to you today some of the concerns they hope to be addressed in the FAA Reauthorization Bill.

The aviation industry is at a crossroads. Thirty years of airline deregulation and more than 100 bankruptcies have left it hobbled. Airline workers have shouldered more than their fair share to help revitalize their employers and their industry.

After surviving an agonizing bankruptcy, their valuable pensions and union protection of our members, such as with Northwest Airlines, are in jeopardy once again because of the upcoming integration with Delta Airlines. America deserves an airline industry that benefits employees, passengers and shareholders.

The FAA Reauthorization Bill is a chance to change course.

Express Carrier. FedEx and United Parcel Service are the Nation's two largest package delivery companies but FedEx asserts that its non-airport operation employees, like truck mechanics and delivery drivers, should also be covered by the Railway Labor Reg. The company argues that the language in the Railway Labor Act that provides the NMB, the National Mediation Board, with jurisdiction over express companies applies to FedEx.

Similar employees at UPS, however, fall under the National Labor Relations Act and many are unionized. The National Labor Relations Act allows employees to be organized in one location or portion thereof at a time, making it more difficult for employees to join unions and therefore avoid paying the fair wages and benefits. FedEx has a competitive advantage of UPS.

Congress had deliberately removed the term "express company" from the Railway Labor Act in 1995 as part of the Interstate Commerce Commission Termination Act. This was done because the last express company had gone out of business two decades earlier. FedEx spearheaded the reinserting of this language in the Railway Labor Act a year after it was removed to unionize itself from organizing campaigns.

Likewise, Congress should exempt FedEx from the same law it applies to UPS. I urge it should not exempt FedEx from the same law that applies to UPS.

In recent years, the National Mediation Board asserted jurisdiction over companies that either are airlines or railroads and whose companies whose employees have worked and negotiated contracts under the jurisdiction of the National Labor Relations Act for decades.

This misapplication of Railway Labor Act has left many workers without a union or a contract. This very serious situation allowed 100 employees in Minneapolis Airport to be walked off the job after the National Mediation Board disasserted jurisdiction without an election of people who had voted for a union by secret ballot for more than 50 years.

FAA Oversight of Aircraft Maintenance. As carriers try to cut costs in an effort to deal with the effects of deregulation, they increasingly look toward aircraft maintenance for savings and this directly impacts the quality of work performed.

The FAA needs adequate funding to hire sufficient number of inspectors to ensure aviation maintenance safety at home and

abroad. An immediate increase in FAA inspectors along with the resources they need is necessary to safeguard the U.S. aviation industry.

Maintenance personnel who work on U.S. aircraft should meet the same eligibility requirements at home and abroad. A mechanic working on an aircraft at an airline's base in the United States must pass a criminal background check and be subject to random drug testing, yet a mechanic working on the same aircraft overseas is not subject to the same safety precautions.

The Committee should demand one level of safety and oversight for the industry regardless of where the aircraft is repaired.

Flight Attendant Fatigue Safety. Flight attendant fatigue is a safety issue that needs to be better addressed by the Federal Air Regulations. Similarly, the lack of workplace health and safety regulations for flight attendants is dangerous. It is time for Congress and the Administration to put flight attendant workplace under OSHA jurisdiction.

To prevent flight attendant fatigue, mandatory flight attendant rest periods should be changed to require a period of rest exclusive of any job responsibilities or hotel transfer. Flight attendants cannot ensure safety of their passengers if they are fatigued. Rest means rest period. Rest means rest.

While most Americans strive for an 8-hour day and work 16 hours free of work, flight attendants work 16-hour days with only 8 hours off.

In closing, since 9/11 airline workers have sacrificed their wages, pensions, work rules and 2,000 jobs in order to rescue the airline industry. Industry conditions have imposed great burdens on workers, such as carriers compete to reduce costs. Such an extraordinary focus on the bottom line demands greater, not less, government oversight and proper FAA funding is a must.

No group is more interested in airline safety than IA members. Congress must assure that the FAA bill is good for workers, passengers and entire aviation system and the Machinists Union urges the Committee to take appropriate action to protect the skies, and we stand willing to work with this Committee to reach that goal.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Roach follows:]

PREPARED STATEMENT OF ROBERT ROACH, JR., GENERAL VICE PRESIDENT,
INTERNATIONAL ASSOCIATION OF MACHINISTS AND AEROSPACE WORKERS

Thank you, Mr. Chairman, and Members of this Subcommittee, for the opportunity to speak to you today. My name is Robert Roach, Jr., General Vice President of Transportation for the International Association of Machinists and Aerospace Workers (IAM). I am appearing at the request of International President R. Thomas Buffenbarger. The Machinists Union is the largest airline union in North America. We represent more than 100,000 U.S. airline workers in almost every classification, including Flight Attendants, Ramp Service workers, Mechanics and Public Contact employees. On behalf of the workers who ensure the United States has a safe, secure and reliable air transportation system, I am presenting to you today some of the concerns they hope will be addressed in the FAA reauthorization bill.

The aviation industry is at a crossroads. Thirty years of airline deregulation, reckless management decisions and more than a hundred bankruptcies have left it hobbled. Airline workers have shouldered more than their fair share to help revitalize their employers and their industry. After surviving an agonizing bankruptcy, the valuable pensions and union protection our members have at Northwest Airlines are in jeopardy once again because of the upcoming integration with Delta Air Lines.

America deserves an airline industry that benefits employees, passengers and shareholders, not just executives. This FAA reauthorization bill is a chance to change course, and I urge you to take advantage of this opportunity.

Express Carrier

FedEx and United Parcel Service (UPS) are the Nation's two largest package delivery companies. They each have employees that work exclusively in the air transportation sector of their operation (pilots, aircraft mechanics, aircraft cargo loaders), and package delivery personnel (truck drivers, truck mechanics and customer service agents). The employees of each company serve the same functions and deliver the same type of service. Yet, employees of UPS and FedEx fall under different labor laws, and it is time for Congress to provide consistency in the industry.

UPS and FedEx pilots are both unionized under the jurisdiction of the National Mediation Board (NMB) and Railway Labor Act (RLA), which requires all employees in a class and craft to be organized simultaneously nationwide. Similarly, both corporations airport employee are correctly regulated by the RLA. But FedEx asserts that its non-airport operation employees, like truck mechanics and delivery drivers, should also be covered by the RLA. The company believes that language in the RLA that provides the NMB with jurisdiction over "express companies" applies to FedEx. Similar employees at UPS, however, fall under the National Labor Relations Act (NLRA) and many are unionized. The NLRA allows employees to organize one location, or portion thereof, at a time. By making it more difficult for its employees to join unions, and thereby avoiding paying the higher wages and benefits that come with unionization, FedEx has a competitive advantage over UPS.

Congress had deliberately removed the term "express company" from the RLA in 1995 as part of the Interstate Commerce Commission (ICC) Termination Act. This was done because the last "express company" had gone out of business two decades earlier. "Express companies," as cited in the RLA and ICC, does not include today's parcel delivery companies, such as FedEx and UPS. "Express companies" were regulated by the ICC and accepted small packages and arranged for their shipment on common carrier railroads. FedEx spearheaded reinserting the language into the RLA a year after it was removed to immunize itself from union organizing campaigns. Congress gave FedEx a competitive advantage, and it is only fair to level the playing field.

The FedEx legislation did not pass without controversy. Senator Ted Kennedy said at the time that, "Federal Express is notorious for its anti-union ideology—but there is no justification for Congress to become an accomplice in its union-busting tactic."

FedEx recently announced that if its non-airline-related employees should fall under the jurisdiction of the NLRA and have the same rights as UPS workers, it would cancel a \$6.75 billion order for 30 Boeing 777s. Mr. Chairman, the Machinists Union represents more than 35,000 Boeing workers. FedEx CEO Fred Smith should buy Boeing planes because they are the best-made planes in the world, not because Congress gave him a competitive advantage over UPS.

Removing the outdated language does not mean FedEx employees will unionize. It only means FedEx can no longer deny them the opportunity to organize if they so choose. Congress should not exempt FedEx from the same law that applies to UPS.

I urge the Senate to also put fairness and consistency back in to the law by modifying the misapplied "express carrier" language in the RLA.

Fixed Base Operators

The Railway Labor Act (RLA) vests the National Mediation Board (NMB) with the responsibility to investigate and conduct union representation elections for airline and railroad employees. The National Labor Relations Board (NLRB) has the same responsibility in virtually all other private sector industries.

In recent years the NMB has improperly asserted jurisdiction over companies that are neither airlines nor railroads, and whose employees have worked and negotiated contracts under the jurisdiction of the NLRB for decades. The misapplication of the Railway Labor Act has left many workers without a union or a contract. In one case, the NMB terminated the union representation and collective bargaining agreement for airport fuelers who were organized under the NLRA and who had union protection for more than thirty years. These workers lost the grievance procedure, right to double time, holidays, sick leave and vacation leave that had been negotiated by the Machinists Union—and they lost those benefits without a vote.

FAA Oversight

As carriers tried to cut costs to in an effort to deal with the effects of deregulation, they increasingly looked toward aircraft maintenance for savings, and this directly impacts the quality of the work performed.

Airlines used the grossly unfair bankruptcy laws to cut employee wages and fracture labor agreements that prohibited or strictly limited outsourcing aircraft maintenance. As a consequence of putting dollars ahead of sense, maintenance of U.S. aircraft has been exported across the globe at a faster pace than the FAA could respond.

The FAA needs adequate funding to hire a sufficient number of inspectors to ensure aviation maintenance safety, at home and abroad. An immediate increase in FAA inspectors, along with the resources they need, is necessary to safeguard the U.S. aviation industry.

IAM mechanics have found aircraft that return from overseas flights departed with obvious mechanical problems. When they reported the problems to the FAA, inspectors expressed frustration. Budget constraints limit their ability to inspect overseas maintenance operations, and when they do perform inspections they must provide overseas repair stations advance notice, making the inspections worthless. Not only is more oversight of overseas repair stations necessary, but the ability to make unannounced inspections is absolutely imperative to ensure compliance with FAA directives.

IAM mechanics working on a U.S. Airways aircraft in Charlotte, NC encounter FAA inspectors on a daily basis. It is unacceptable that maintenance personnel working on the airline's planes in El Salvador do not have the same oversight.

Similarly, personnel who work on U.S. aircraft should meet the same eligibility requirements at home and abroad. A mechanic working on an aircraft at an airline's overhaul base in the United States must pass a criminal background check and is subject to random drug testing. Yet, a mechanic working on the same aircraft overseas is not subject to the same safety precautions. This committee should demand one level of safety and oversight for the industry regardless of where the aircraft is repaired.

Flight Attendant Safety

The recent successful evacuations of Continental flight 1404 in Denver and U.S. Airways flight 1549 in the Hudson River demonstrate flight attendants' skill and heroism. The time is long overdue for the FAA to protect these professionals who are responsible for protecting the public.

Currently, the FAA mandates flight attendants receive only 9 hours rest on layovers, or as little as 8 hours if there are irregular operations. Although well intentioned, this regulation does little to ensure public safety because the rest period includes time when flight attendants are required to perform other job-related duties.

To prevent flight attendant fatigue, the mandatory rest period should be changed to require a period of rest EXCLUSIVE of any other job responsibilities or hotel transfer time. Flight attendants cannot ensure the safety of their passengers if they are fatigued. Rest means rest—period. While most Americans strive for an 8-hour work day and 16 hours free from work, flight attendants work 16-hour days with only 8 hours off.

The IAM's flight attendant collective bargaining agreements exceed the FAA's mandatory rest minimum, but not all flight attendants have the security of a collective bargaining agreement. Flight attendant fatigue is a safety issue that needs to be better addressed by the Federal Air Regulations.

Similarly, the lack of health and safety regulations for flight attendants at work is dangerous. Flight attendants are one of the few work groups in the country not protected by the Occupational Safety and Health Administration (OSHA). In 1975, the FAA claimed jurisdiction over workplace safety and health of flight crew members. The FAA, however, has done nothing to enforce safety and health standards for flight attendants. After complaints from the Machinists and other unions, the FAA and OSHA in August 2000 signed a Memorandum of Understanding to explore extending OSHA jurisdiction to cover seven flight attendant health and safety issues: whistle blower protections; recordkeeping; blood borne pathogens; noise; sanitation; hazard communication; anti-discrimination and access to employee exposure/medical records. In 2001, however, the new Bush Administration abruptly stopped their progress, leaving flight attendants the only airline workers without workplace safety and health protections. It is time for this Congress and this Administration to put flight attendant workplace safety under OSHA jurisdiction.

Since 9/11, airline workers have sacrificed their wages, pensions, work rules and, more than 200,000 jobs in order to rescue the airline industry. Industry conditions have imposed great burdens on workers as carriers compete to reduce costs. Such

an extraordinary focus on the bottom line demands greater, not less, government oversight, and proper FAA funding is a must. No group is more interested in airline safety than IAM members. Congress must ensure that an FAA bill is good for workers, passengers and the entire aviation system. The Machinists Union urges the Committee to take appropriate action to protect our skies, and we stand willing to work with the Committee to reach that goal.

Thank you for the opportunity to speak here today. I look forward to your questions.

Senator DORGAN. Mr. Roach, thank you very much.

Next, we will hear from Mr. Ken Hall, Vice President-at-Large of the International Brotherhood of Teamsters.

Mr. Hall, welcome.

**STATEMENT OF KEN HALL, VICE PRESIDENT-AT-LARGE,
PACKAGE DIVISION DIRECTOR,
INTERNATIONAL BROTHERHOOD OF TEAMSTERS**

Mr. HALL. Good afternoon, Mr. Chairman, Members of the Aviation Subcommittee.

My name is Ken Hall. I'm Vice President-at-Large and the Director of the Package Division of the International Brotherhood of Teamsters, the largest transportation union in the country.

I'm honored to have the opportunity to testify before this subcommittee on behalf of the more than 1.4 million Teamster men and women and especially on behalf of more than 300,000 Teamsters who work in the Package and Airline Divisions.

In the short time available for my presentation, I will focus on two areas of concern to Teamsters and the entire American public: fixing the express carrier loophole to level the playing field in the package delivery industry and creating a single high regulatory standard with respect to aircraft maintenance outsourcing.

Mr. Chairman, the Teamsters strongly support the language in H.R. 915 authored by Chairman Oberstar which closes a loophole in current law allowing one company, FedEx, to misclassify thousands of its workers under the wrong labor law.

The result is that Congress has granted one company an unfair competitive advantage and deprived its workers of rights that similarly-situated employees working for other package delivery companies enjoy.

The loophole in current law is bad public policy. Because of the special treatment that FedEx Express receives, the majority of its employees, as a practical matter, cannot choose to secure union representation.

For example, UPS employees who work as package car drivers, tractor-trailer drivers, loaders, unloaders, sorters and truck mechanics can organize under the NLRA. Employees at FedEx Express who perform precisely the same work requiring the same skill sets are treated dramatically different under our labor laws and are subject to the Railway Labor Act, even though they never touch an airplane.

The employees performing the same work employed by companies that provide the same service should have the same rights to organize a union. Unfortunately, the quirk in the current law has deprived FedEx workers of their right to determine whether to organize in their workplace communities, a right which is enjoyed by their counterparts at UPS.

The Teamsters respectfully urge this Subcommittee, the full Committee, and the U.S. Senate to include the Express Carrier Employee Protection Act language in the FAA Reauthorization Bill.

The second subject I would like to address is of vital importance to the safety of America's flying public, as well as, to the national security of our country: the dangerous trend of outsourcing heavy aircraft maintenance on American commercial aircraft to foreign repair stations.

U.S. air carriers have ever-increasing amounts of significant maintenance performed on their aircraft by FAA-certified foreign repair stations or their contractors that are not subject to the same safety and security standards as domestic repair stations.

In fact, the Department of Transportation's Inspector General reported that 71 percent of heavy air frame maintenance work was outsourced in 2007 with about 27 percent going to foreign stations.

This trend has eroded passenger safety, increased homeland security risk and decimated a skilled workforce of American aircraft mechanics.

In addition to the current language of H.R. 15, the IBT has proposed additional legislation, the Aircraft Maintenance Safety and Security Act of 2009, requiring the FAA and the TSA to ensure that passengers on U.S. airlines are provided with the same level of safety and security regardless of where the aircraft was maintained.

Specifically, our bill calls for the same drug and alcohol testing programs and the same pre-employment investigations, including criminal background checks and restrictions for employees and contractors of FAA's certified foreign repair stations, as are required at domestic repair stations, and establishing and enforcing the same high levels of FAA and TSA oversight with a deadline of one year requiring the FAA and the TSA to develop and promulgate the necessary rules to implement the safety and security objectives relating to H.R. 915.

In other words, the IBT strongly urges a single high regulatory standard for all repair stations, both domestic and foreign. This is the only way to ensure the safety of America's flying public and to protect our homeland from threats originating in a foreign repair station as a result of lax regulatory standards.

Mr. Chairman, let me again urge this Subcommittee and the full Commerce Committee to act as quickly as possible to enact legislation reauthorizing the FAA.

Thank you for the opportunity to share the views of the IBT with this distinguished Subcommittee.

[The prepared statement of Mr. Hall follows:]

PREPARED STATEMENT OF KEN HALL, VICE PRESIDENT-AT-LARGE,
PACKAGE DIVISION DIRECTOR, INTERNATIONAL BROTHERHOOD OF TEAMSTERS

Good afternoon, Mr. Chairman and Members of the Aviation Subcommittee.

My name is Ken Hall, Vice President-at-Large and Director of the Package Division of the International Brotherhood of Teamsters, the largest transportation union in the country.

I am honored to have the opportunity to testify before this Subcommittee on behalf of 1.4 million Teamster men and women, and especially on behalf of over 300,000 Teamsters who are part of the Package and Airline Divisions of the IBT.

The Teamsters are committed to safety on the ground and safety in the skies. Our 1.4 million members understand and strongly support the efforts of this Sub-

committee, and indeed the efforts of the entire Congress, to enact, this year, legislation reauthorizing the Federal Aviation Administration.

In the short time available for my oral presentation, I will focus on two areas of concern to Teamsters and the entire American public:

- Fixing the express carrier loophole to level the playing field in the package delivery industry, and;
- Creating a single high regulatory standard with respect to aircraft maintenance outsourcing.

Mr. Chairman, the Teamsters strongly support the language in H.R. 915, authored by Chairman Jim Oberstar, which closes a loophole in current law allowing one company, FedEx, to misclassify thousands of its workers under the wrong labor law. The result is that Congress has granted one company an unfair competitive advantage and deprived its workers of rights that similarly situated employees working for other package delivery companies enjoy.

As we all know, private sector labor-management relations in our country are governed by two laws—the Railway Labor Act and the National Labor Relations Act. Mr. Oberstar’s language restores the original intent of the Railway Labor Act by stipulating that employees of an express carrier are covered by the Railway Labor Act only if their work relates directly to aircraft operations, while employees that have nothing to do with aircraft operations are covered under the National Labor Relations Act. We believe that this legislation is fair and reasonable.

The loophole in current law is bad public policy. Because of the special treatment that FedEx Express receives, the majority of its employees as a practical matter cannot choose to secure union representation. For example, UPS employees who work as package car drivers, tractor trailer drivers, loaders, unloaders, sorters and truck mechanics can organize under the NLRA. Employees at FedEx Express who perform precisely the same work requiring the same skill sets are treated dramatically different under our labor laws and are subject to the Railway Labor Act, even though they never touch an airplane. Employees performing the same work, employed by companies that provide the same services, should have the same rights to organize a union. Unfortunately, the quirk in the current law has deprived FedEx workers of the right to determine whether to organize in their workplace communities, a right enjoyed by their counterparts at UPS.

The Teamsters respectfully urge this Subcommittee, the full Committee and the U.S. Senate to include the Express Carrier Employee Protection Act language in the FAA Reauthorization Bill.

The second subject I would like to address is of vital importance to the safety of America’s flying public as well as to the national security of our country; the dangerous trend of outsourcing heavy aircraft maintenance on American commercial aircraft to foreign repair stations.

U.S. air carriers have ever-increasing amounts of significant maintenance performed on their aircraft by FAA-certified foreign repair stations or their contractors that are *not* subject to the same safety and security standards as domestic repair stations.

The Department of Transportation’s Inspector General reported that 71 percent of heavy airframe maintenance work was outsourced in 2007 with about 27 percent going to foreign stations.

This trend has eroded passenger safety, increased homeland security risk, and decimated a skilled workforce of American aircraft mechanics.

The FAA certifies foreign aircraft repair stations without holding these facilities and their workers to the same standards as domestic repair stations. H.R. 915 attempts to close some of these safety loopholes. Specifically, the bill mandates that foreign stations be inspected at least twice a year by FAA inspectors and that workers at these facilities be held to the same drug and alcohol testing rules as workers at U.S. stations.

In addition, the bill puts an end to non-certified stations, both in the U.S. and abroad, from performing major and significant overhaul work. God forbid one of our aircraft crashes because of shoddy maintenance performed at an uninspected foreign repair station.

In addition to the current language of the H.R. 915, the IBT has proposed additional legislation, “*the Aircraft Maintenance Safety And Security Act of 2009*,” requiring the FAA and the TSA to ensure that passengers on U.S. airlines are provided with the same level of safety and security regardless of where the aircraft are maintained. Specifically, our bill calls for:

- The same drug and alcohol testing programs and the same pre-employment investigations, including criminal background checks and restrictions for employ-

ees and contractors of FAA-certified foreign repair stations as are required at domestic repair stations;

- Establishing and enforcing the same high levels of FAA and TSA oversight with a deadline of one year requiring the FAA and the TSA to develop and promulgate the necessary rules to implement the safety and security objectives relating to H.R. 915.

In other words, the IBT strongly urges a single high regulatory standard for all repair stations both domestic and foreign. This is the only way to ensure the safety of America's flying public and to protect our homeland from threats originating in a foreign repair station as a result of lax regulatory standards.

Foreign based aircraft mechanics should be subject to the same regulations as U.S. mechanics. It makes *sense* to require aircraft mechanics to undergo the drug and alcohol testing and criminal background checks regardless of where they are located. If a station chooses to perform work on U.S. aircraft, that station must meet the same requirements as U.S. repair facilities.

Mr. Chairman, let me again urge this Subcommittee and the full Commerce Committee to act as quickly as possible to enact legislation reauthorizing the FAA.

Thank you for the opportunity to share the views of the IBT with this distinguished Subcommittee.

Senator DORGAN. Mr. Hall, thank you very much.

I'm trying to avoid a lengthy recess of the Committee. The votes, the first vote has begun and there are 3 minutes left in the vote, and Senator Lautenberg, I believe, was intending to vote and return to continue to take testimony. He will be here momentarily.

I'm going to recess and if you would reasonably stay put, I believe Senator Lautenberg will appear in a few moments and I will go vote and be back shortly, and we will continue with Mr. Brantley and Mr. McGlashen and so with that in mind, the Committee will stand in recess for just a couple of minutes.

[Recess.]

Senator LAUTENBERG. This is one of the quickest relays you will have seen in the U.S. Senate and your testimony's important and we apologize for the fact that three votes came up.

So Dorgan is down there now. He's going to vote on the next one and then he's going to come back, but all of your statements will be in the record. Please remember that. You're not talking to air. You're talking to the record and we're pleased to have you here and, please, I think, Mr. Brantley, you're the next one.

**STATEMENT OF TOM BRANTLEY, PRESIDENT,
PROFESSIONAL AVIATION SAFETY SPECIALISTS, AFL-CIO**

Mr. BRANTLEY. Thank you, Senator and Members of the Subcommittee.

I want to thank you for allowing PASS to testify today. We represent approximately 11,000 FAA employees and we do have some specific views on FAA Reauthorization we'd like to share.

One of the most critical areas that we feel must be addressed immediately is fixing the contract negotiations process between the FAA and its unions. The agency's willingness to resume negotiations with air traffic controllers recently is promising and it's a good first step.

However, the current negotiating process that is in law is one-sided and inadequate and it makes meaningful negotiations almost impossible and this leads to difficult working conditions and overwhelming tension between labor and management, all of which

threaten the productivity of FAA employees and the efficiency of the aviation system.

Legislative language is needed to ensure that FAA employees who have chosen to be represented by a union have the same basic right as every other union member in our country, the right to collective bargaining.

PASS fully supports including language in FAA Reauthorization legislation that provides binding arbitration for a neutral third party to resolve bargaining disputes.

PASS is eager to collaborate with the FAA as it works to modernize the Air Traffic Control System, but we have reservations that some of the methods the FAA is employing will not preserve the safety and integrity of the system.

Of utmost concern is the way the FAA has weakened its certification process in which a qualified FAA technician evaluates and tests NAS systems on a periodic basis or when restoring them to service following a failure.

For years FAA policy has maintained that all NAS systems and services directly affecting the flying public will be certified. However, in a drastic change to this policy, the agency now says that only FAA-owned systems and services can be certified.

In other words, the FAA is actually prohibiting the certification of systems that it does not own, regardless of their criticality to the safety of the NAS. PASS believes this change to the Certification Program will continue to degrade the safety of the NAS as the agency modernizes.

For instance, the Automatic Dependent Surveillance Broadcast, ADS-B, one of the cornerstones of NextGen, will be entirely owned by the contractor and under the new certification criteria will not be certified. This will leave a huge gap in the overall safety umbrella that certification currently provides.

While the FAA modernizes, it is critical that new and current systems are properly maintained and certified, especially if they are owned and operated by the private sector.

Another topic that has garnered much attention recently is the need for increased oversight of the work performed at FAA-certificated foreign repair stations. Under current practice, FAA inspectors are charged with certifying foreign repair stations and then recertifying them approximately every 2 years.

However, with the increasing amount of repair work being outsourced to foreign repair stations, inspectors have expressed concern that safety issues are not being addressed. In order to uphold the highest safety standards at all FAA-certificated facilities, inspectors must be permitted to physically inspect foreign repair stations at least twice a year.

A recent agreement entered into by the United States and the European community raises additional concerns by allowing foreign authorities to conduct oversight of the work performed on U.S. aircraft without any involvement from the FAA and its inspectors. PASS believes that the agreement makes it even more imperative that language be included in the FAA Reauthorization legislation allowing FAA inspectors to inspect FAA-certificated foreign repair stations at least twice a year since they will no longer certify and recertify these facilities.

It is important to note that there is no language contained in the agreement that would prohibit the inspection of FAA-certificated foreign repair stations at least twice a year. The United States has the safest aviation system in the world due to a committed focus on safety. It is critical that FAA inspectors be granted the authority to inspect foreign repair stations at least twice a year in order to ensure the continued safety of all U.S. aircraft.

PASS looks forward to working with this committee to ensure the continued safety of our country's aviation system and I thank you for the opportunity to speak with you today.

[The prepared statement of Mr. Brantley follows:]

PREPARED STATEMENT OF TOM BRANTLEY, PRESIDENT,
PROFESSIONAL AVIATION SAFETY SPECIALISTS, AFL-CIO

Chairman Dorgan, Senator DeMint and Members of the Subcommittee, thank you for inviting PASS to testify today on the reauthorization of the Federal Aviation Administration (FAA). The Professional Aviation Safety Specialists, AFL-CIO (PASS) represents approximately 11,000 Federal Aviation Administration (FAA) employees in five bargaining units throughout the United States and in several foreign locations. The largest PASS bargaining unit is the Air Traffic Organization Technical Operations unit, consisting of technical employees (systems specialists, electronics technicians and computer specialists) who install, maintain, repair and certify the radar, navigation, communication automation and environmental systems making up the air traffic control system. The Flight Standards and Manufacturing Inspector units consist primarily of aviation safety inspectors responsible for inspecting every aspect of the commercial and general aviation industries. Additionally, PASS represents flight inspection pilots, procedures development specialists and airborne technicians in Aviation System Standards, examiners in the FAA's Civil Aviation Registry, and support staff.

Reauthorization of the FAA is essential to ensuring that the agency has the ability to provide proper oversight of the aviation industry and guarantee the safe modernization of the air traffic control system. PASS appreciates the opportunity to present our views on issues vital to aviation safety, including technician and inspector staffing, FAA operation and modernization, and safety oversight. In addition, PASS is hopeful that FAA reauthorization legislation will assist in improving labor-management relations at the FAA by repairing the contract negotiations impasse process within the agency, which will help improve productivity and ensure that the FAA has the very best men and women working together to protect the safety of our aviation system.

Contract Negotiations

Over the past several years, labor-management relations within the FAA have been largely dysfunctional. By taking advantage of ambiguities in the current law covering FAA labor negotiations, the FAA has steadfastly refused to bargain in good faith with PASS and other FAA unions. This has resulted in low employee morale, stressful working conditions and overwhelming tension between labor and management—all of which impact the productivity of FAA employees and the efficiency of the aviation system. Ensuring a fair contract negotiations process at the FAA is of utmost importance to PASS and all unions representing FAA employees.

It was recently announced that the Obama Administration will appoint a team of mediators to assist in resolving the contract dispute between the FAA and the National Air Traffic Controllers Association (NATCA). PASS supports these efforts and is encouraged to see NATCA and the FAA returning to the bargaining table. However, this turn of events does not change the fact that the contract negotiations process at the FAA remains broken. The goodwill of the current administration is permitting the FAA and NATCA to meet again in an attempt to resolve their dispute, but FAA unions still have no legal means of resolving bargaining disputes. Legislative language is needed to ensure that FAA employees who have chosen to be represented by a union have the same basic right as every other union member in our country—the right to real collective bargaining.

The status of contract negotiations between PASS and the FAA highlights the need to fix the contract negotiations process at the FAA. Contract negotiations are at impasse with four of PASS's five bargaining units, representing approximately 4,000 employees in the Flight Standards, Aviation System Standards, Aviation Reg-

istry and Manufacturing Inspector District Office bargaining units. Negotiations over new contracts for these employees have been at impasse for *over six years*. In PASS's largest bargaining unit, Technical Operations, the FAA showed little interest in reaching a mutual agreement with PASS. As a result, when the agency's final proposal was submitted for a vote, 98 percent of respondents rejected it. It is unclear when the negotiations process will begin again due to pending legal proceedings initiated and unnecessarily prolonged by the FAA.

It is obvious that legislative language is needed in order to correct the contract negotiations process at the FAA. PASS supports including language in the FAA reauthorization legislation clarifying that the Federal Service Impasses Panel has jurisdiction over the FAA and that binding arbitration before an impartial board of arbitrators is the appropriate method of resolving bargaining impasses such as those currently facing PASS and other FAA unions.

ATO Technical Operations

Staffing and Training

The largest PASS bargaining unit is the Air Traffic Organization (ATO) Technical Operations unit, consisting of employees who install, maintain, repair and certify the radar, navigation, environmental, automation and communication systems making up the air traffic control system. PASS believes that insufficient technical staffing continues to be a major problem at numerous facilities throughout the country, and an increasing attrition rate among the most experienced technical personnel in these safety-sensitive positions is worsening the critical staffing crisis. For the vast majority of time over the past several years, the FAA has been below its required minimum safe number of 6,100 technical employees. In fact, some facilities are staffed at less than half of what the facility's workload generates. The technical workforce understaffing is further exacerbated by the agency's inability and unwillingness to accurately determine the right number of employees and job skills needed to safely and efficiently maintain the National Airspace System (NAS). Currently, the FAA does not have a staffing standard or model that can accurately determine the number of FAA technicians needed and the training required to maintain its current system while also introducing new technology, systems and equipment as the FAA transitions to the Next Generation Air Transportation System (NextGen).

It is widely acknowledged that the FAA must continue to maintain existing systems as it transitions to NextGen; yet, the agency is failing to do so. In a recent report, the Government Accountability Office (GAO) noted that "more and longer unscheduled outages of existing ATC equipment and ancillary support systems indicate more frequent system failures."¹ In fact, in a 2007 report, the GAO focused on the duration of unscheduled outages, citing an increase from an average of 21 hours in 2001 to about 40 hours in 2006 as a potential sign that "maintenance and troubleshooting activities are requiring more effort and longer periods of time."² PASS believes these numbers reflect both a shortage of staffing and are the result of changes to the FAA's maintenance philosophy. When multiple systems require maintenance, insufficient staffing forces the agency to allow some outages to go unanswered until a technician is available. Additionally, the FAA's shift from a proactive maintenance approach to a "fix on fail" scheme degrades the agency's ability to respond to system failures. In the past, FAA technicians performed preventive maintenance and periodic certification of systems and equipment, which allowed them to find potential problems before they became actual outages. This not only kept systems in much better working order, but it also ensured a high level of technical proficiency for the FAA workforce. More and more, FAA technicians are seeing their proficiency reduced at the same time that failures are becoming increasingly compounded and severe due to the FAA's abandonment of its proactive, preventive maintenance approach. With no changes by the FAA, these problems will continue to grow, resulting in an unacceptable increase in failures in the future. The GAO has emphasized that it will be critical for the FAA to ensure the safety and efficiency of the legacy ATC systems and recommended implementing a "robust preventive and regular maintenance strategy and to support the skilled personnel that will be required to implement the strategy."³

¹ Government Accountability Office, *FAA Reauthorization Issues are Critical to System Transformation and Operations*, GAO-09-377T (Washington, D.C.: February 11, 2009), p. 1.

² Government Accountability Office, *Next Generation Air Transportation System: Progress and Challenges in Planning and Implementing the Transformation of the National Airspace System*, GAO-07-649T (Washington, D.C.: March 22, 2007), pp. 10-11.

³ Government Accountability Office, *FAA Reauthorization Issues are Critical to System Transformation and Operations*, GAO-09-377T (Washington, D.C.: February 11, 2009), p. 2.

PASS is aware that a continued debate over the number of employees that the FAA needs to maintain the NAS safely and efficiently diverts attention away from more critical issues that must be addressed as the agency moves forward. For that reason, PASS is strongly in favor of requiring the FAA to develop and use a staffing model that takes into account the agency's current and future needs with regard to technical staffing. Establishing and implementing such a model would ensure that the FAA's request for technical staffing and training is based on the agency's actual needs rather than budgetary goals set by the Office of Management Budget.

PASS requests that language be included in the FAA reauthorization legislation directing the National Academy of Sciences to examine the staffing needs of the technical workforce and the GAO to conduct a study of technical training. In today's changing aviation environment, it is critical that there is a staffing standard in place for the FAA technical workforce and that the FAA is required to abide by that standard to help ensure that it has an adequate number of professionally trained technical employees to maintain both the current and future air traffic control system.

Involvement in FAA Modernization

In the past, PASS was actively involved in many of the FAA's efforts to develop and modernize the NAS. The input provided by PASS bargaining unit members was invaluable, resulting in safer systems, smoother deployment and less cost. Despite the obvious benefits of involving the employees who use and operate the systems in the development of those systems, about 6 years ago, the FAA abruptly eliminated PASS's participation. As the FAA continues to modernize the system, it is critical that the men and women responsible for maintaining, certifying and protecting this country's aviation system be meaningfully involved at every point in the process.

Implementation of additional NextGen systems must include stakeholder participation—especially FAA technicians who are extremely knowledgeable of every aspect of the NAS and how each system affects every other system. At a 2008 hearing before the House Committee on Science and Technology, the GAO emphasized the importance of involving FAA stakeholders, such as FAA technicians, in the implementation of any new project, stressing that stakeholders will play a key role in implementing NextGen. The GAO specifically stated that FAA technicians are not playing a large enough role. "Although air traffic controllers and technicians will be responsible for a major part of the installation, operations, and maintenance of the systems that NextGen will comprise, our work has shown that these stakeholders have not fully participated in the development of NextGen. Insufficient participation on the part of these employees could delay the certification and integration of new systems and result in increased costs, as we have seen in previous ATC [air traffic control] modernization efforts."⁴

PASS acknowledges that the FAA's decision to halt the collaborative efforts with its unions regarding FAA modernization was a direct result of the agency's unfortunate labor-relations policy under the previous administration. While PASS has once again started to become involved in modernization projects, the process presently relies on the goodwill of the administration rather than common sense and historical fact, making it essential that language be included in the FAA reauthorization legislation requiring the FAA to collaborate with its unions in the planning, development and deployment of air traffic control modernization projects. This will ensure the safe and efficient modernization of the system.

Consolidation and Realignment of FAA Facilities

PASS has serious reservations regarding the FAA's consolidation and realignment of facilities and believes that it is imperative that all stakeholders are involved in order to ensure the safety of the system. The GAO has expressed concern with the FAA's process, stating that "any such consolidations must be handled through a process that solicits and considers stakeholder input throughout, and fully considers the safety implications of any proposed facility closures or consolidations."⁵

While the FAA emphasizes the money-saving aspects of consolidation, all aspects of the process and impacts of any actions must be considered prior to making a decision. For instance, in some cases, the consolidation of a facility does not necessarily mean the consolidation or relocation of the associated work. In these instances, con-

⁴ Government Accountability Office, *Next Generation Air Transportation System: Status of Key Issues Associated with the Transition to NextGen*, GAO-08-1154T (Washington, D.C.: September 11, 2008), p. 7.

⁵ Government Accountability Office, *Next Generation Air Transportation System: Progress and Challenges in Planning and Implementing the Transformation of the National Airspace System*, GAO-07-649T (Washington, D.C.: March 22, 2007), p. 12.

solidation may mean only increasing the distance between employees and the work as equipment and systems are maintained by employees located at other facilities. Furthermore, the understaffing of the technical workforce makes this situation even more dangerous and a lack of proper staffing at consolidated facilities would place even more stress on the aviation system.

Clearly, FAA technicians represented by PASS would have a unique view into the impact of any closures or consolidations. In order to preserve a primary focus on safety, it is imperative that stakeholders are involved in every aspect of the consolidation process. PASS supports including language in the FAA reauthorization legislation putting forth a process where stakeholders, including PASS, are involved with any decisions related to the closing or consolidating of FAA facilities and that safety of the aviation system is always the primary goal.

Privatization

Elimination of Certification

Certification is the process in which a certified FAA technician checks and tests systems or pieces of equipment on a periodic basis in order to ensure that they can safely remain in or be returned to service and not negatively impact any aspect of the NAS. The FAA's certification process has been successful for decades and is a key element in maintaining the safest and most efficient air transportation system in the world.

Despite the success of its certification program, the agency is making radical changes to its policy that PASS and the FAA technicians it represents believe will impact the safety of our aviation system. For years, the criteria established by FAA policy for determining which NAS systems and services require certification stated, "NAS systems, subsystems, and services directly affecting the flying public shall be certified."⁶ However, in a drastic change, effective September 28, 2007, the agency changed its policy to read, "FAA owned NAS systems, subsystems, and services directly affecting the flying public shall be certified" (emphasis added).⁷ In other words, the FAA has not only changed its criteria to allow systems and services to be deployed without requiring certification, it has changed the policy to actually *prevent* certification of systems it does not own.

Curiously, the criteria used by the FAA to determine which NAS systems, subsystems and services must be certified remains the same. Certification is required if the system or service meets any one of the following criteria:

1. Provide moment-by-moment positional information to pilots or air traffic control operations personnel during aircraft operations.
2. Provide necessary communication or communication control among pilots and air traffic control operations personnel during the above aircraft operations.
3. Provide decision support information that directly affects aircraft heading, altitude, routing, control, or conflict awareness.
4. Provide essential meteorological information for takeoff and landing aircraft at airports.
5. Provide short term, long term, continuous, and conditioned power to NAS systems requiring certification located at a Service Delivery Point (SDP).⁸

The FAA recognizes that its certification criteria are valid; it simply precludes its use on systems or services that it privatizes.

The biggest obstacle the FAA has traditionally faced when wanting to outsource portions of the NAS has been its certification program. When systems require certification, technicians must be trained to a sufficient level in order to be able to judge whether a system is functioning as intended. If the agency must train its technicians, it makes no sense to pay a vendor to perform maintenance. Although certification was intended to provide an absolute safety net for NAS operations, many in the FAA's acquisition workforce, as well as most senior FAA officials, merely view certification as something preventing large-scale privatization of the NAS.

By altering its policy to specify that only *FAA owned* systems, subsystems and services shall be certified, the FAA abandons its ability to provide the highest level of safety oversight to the flying American public. In fact, this change goes against the very definition of certification contained in FAA Order 6000.15:

⁶FAA Order 6000.15D—*General Maintenance Handbook for National Airspace System (NAS) Facilities*, dated July 23, 2004.

⁷FAA Order 6000.15E—*General Maintenance Handbook for National Airspace System (NAS) Facilities*, dated September 28, 2007.

⁸*Id.*

Certification is a quality control method used by the ATO to ensure NAS facilities are providing their advertised service. The ATO employee's independent discretionary judgment about the provision of advertised services, the need to separate profit motivations from operational decisions, and the desire to minimize liability, make the regulatory function of certification and oversight of the NAS an inherently governmental function.⁹

PASS believes this drastic change to the certification program is an extremely risky endeavor with the potential to threaten the safety of NAS modernization. For instance, the Automatic Dependent Surveillance-Broadcast (ADS-B) is a digital alternative to radar that allows aircraft to transmit their exact position, direction of flight and speed to ground stations and other aircraft. The system has been deemed "the future of air traffic control"¹⁰ by the FAA and is expected to be the basis of NextGen. However, since the FAA will not own the ADS-B hardware, software or infrastructure, the system will not be certified by FAA employees. Instead, the FAA will entrust responsibility for the safe operation of ADS-B entirely to private contractors. The Department of Transportation Inspector General (IG) has expressed concern that as a result the FAA "could find itself in a situation where it knows very little about the system that is expected to be the foundation of NextGen" and encouraged the agency to "take steps to ensure it effectively addresses this risk."¹¹ It must be emphasized that this interpretation of the agency's certification criteria would apply not only to ADS-B but also to any system that is not owned by the FAA.

While the FAA transitions to NextGen, it is critical that new and current systems are properly maintained and certified and that products and systems owned by a third party are held to the same certification standards as FAA systems and equipment. As such, PASS proposes that language be added to the FAA reauthorization legislation making it clear that the FAA will make no distinction between public or privately-owned equipment, systems or services used in the NAS when determining certification requirements.

Airport Takeover of Navigation Facilities

Under the previous administration, there was an effort to establish a pilot program for airport takeover of air navigation facilities that would allow the FAA to permit public or private sponsors to assume ownership and responsibility for maintenance and operations of runway lighting, navigational aid systems (navaids) and weather equipment. PASS is extremely concerned with this pilot program or any similar program that would allow these public or private sponsors to maintain and operate systems and equipment currently the responsibility of FAA employees. Consider the following:

- Although the FAA claims that ownership and responsibility for maintenance and operations of navaids and weather equipment is currently split between the FAA and the airport, in reality, the vast majority of airports rely on highly-skilled FAA technicians to maintain and operate the systems and equipment.
- FAA technicians are specifically trained to address the intricate details of this work and should be the only people trusted with this responsibility.
- If the airport authority was unsuccessful in its attempt to assume or continue responsibility for airport maintenance and operations, including lack of funding or the ability to find quality staff, the FAA would be unable to resume those duties, leaving the airport's viability at risk.

As one of the largest and most intricate networks in the world, the NAS cannot be safely divided into individual components, just as the work of those responsible for maintaining it cannot be contracted out as independent functions. PASS believes that this pilot program is aimed at privatizing aspects of the NAS, which would only succeed in threatening the safety of this country's aviation system. As such, PASS believes that the FAA should not be permitted to launch a pilot program aimed at allowing airport takeover of air navigation facilities.

Aviation System Standards (AVN)

Flight procedures and flight inspection employees in Aviation System Standards (AVN) are charged with developing, evaluating, certifying by flight inspection and

⁹*Id.*

¹⁰Federal Aviation Administration, "Fact Sheet: Automatic Dependent Surveillance-Broadcast (ADS-B)," June 21, 2007.

¹¹Department of Transportation Inspector General, *Challenges Facing the Implementation of FAA's Automatic Dependent Surveillance-Broadcast Program*, CC-2007-100 (Washington, D.C.: October 17, 2007), pp. 2-3.

maintaining the 18,000 instrument flight landing and takeoff procedures for every major and municipal instrument-capable airport across the country. The development, flight inspection and maintenance of flight procedures involves strict compliance with a complex series of computations, measurements and modeling standards.

Current administration regulations and directives provide for third-party development of special-use operational and approach procedures. These special-use procedures, which can also be labeled non-public, are not fully integrated into the NAS. However, in the last year, the FAA has started contracting out the development of public-use procedures, specifically Required Navigation Performance (RNP) approach procedures at Bradley International, Windsor Locks, Connecticut, and Savannah/Hilton Head International, Savannah, Georgia. The development, evaluation, certification and maintenance of public-use RNP procedures and all other public-use procedures have always been performed and fully integrated into the NAS by highly-trained and skilled professionals in AVN who have never missed a performance or production goal set forth by the FAA. PASS believes this safety-critical work to be inherently governmental.

In the past, there has been a move to accelerate through outsourcing the development and implementation of RNP procedures, which PASS has criticized since it allowed for third-party performance of safety-critical work. Recently, the FAA has stated that it does not see the need to implement an acceleration of the development of RNP procedures and revealed that the FAA has the production capacity to meet existing implementation demand by reallocating resources to meet production goals. Furthermore, the FAA stated that expanding the authority for use of third parties does not necessarily result in an increased ability to implement RNP or any other Performance-Based Navigation procedures. As such, PASS believes that language to increase the number of RNP procedures and to expand the contracting out of this inherently governmental work should not be included in the FAA reauthorization legislation.

Aviation Safety

Inspector Staffing

PASS represents approximately 3,100 Flight Standards field aviation safety inspectors and 150 Manufacturing Inspection District Office aviation safety inspectors who are responsible for certification, education, oversight, surveillance and enforcement of the entire aviation system. PASS is extremely concerned about staffing of the FAA inspector workforce. Inspector staffing levels are not adequate to meet growing industry demands and ensure the safety of the aviation system, and nearly half of FAA inspectors are eligible to retire over the next several years. Insufficient inspector staffing combined with the evolving aviation industry places an incredible workload on the inspector workforce, which has already resulted in missed or canceled inspections due to lack of staffing. With the increased outsourcing of maintenance work in this country and abroad, growing number of aging aircraft, the emergence of new trends in aviation (such as very light jets, unmanned aircraft and regional carriers), the increasing number of aviation manufacturers and the expansion of the FAA's designee programs—all of which require additional inspector oversight—it is imperative that there are enough inspectors in place to monitor the safety of the system.

Without a doubt, the state of the inspector workforce must be closely monitored as the aviation industry continues to evolve. PASS supports including language in the FAA reauthorization legislation directing the FAA to increase the number of inspectors and support staff and authorizing specific funding to increase safety-critical staffing. Furthermore, PASS suggests adding language specifically directing the FAA to increase staffing according to the results of the development of the inspector staffing model.

Aviation Safety Oversight

Following last year's Southwest incident, the results of an audit released by the IG and information revealed during hearings before Congress, there was an increased focus on improving and increasing FAA safety oversight. PASS believes language should be included in this year's FAA reauthorization bill in order to ensure proper and safe oversight of the aviation industry. Specifically, PASS believes the following elements should be included in the legislation:

Modification of Customer Service Initiative (CSI): The advertised intent of the CSI was to allow certificate holders to request reconsideration of a decision made by an aviation safety inspector. Within this document as well as other statements of policy, the FAA refers to air carriers or other entities regulated by the agency as "customers." In PASS's view, the FAA should be focused on

protecting aviation safety and treating the flying public as the most important customer. Therefore, PASS suggests including language in the FAA reauthorization bill modifying the CSI program in order to make clear that the flying public are the customers. In addition, PASS requests that language be added to establish a workgroup, which includes the exclusive collective bargaining representative of aviation safety inspectors, to review the CSI and make any necessary changes in order to ensure that it is being used appropriately.

Post-Employment Restrictions for Flight Standards Inspectors: PASS fully supports the establishment of a two-year cooling-off period for FAA inspectors or persons responsible for FAA inspectors before that individual can act as an agent or representative before the FAA of a certificateholder that they oversaw during their service with the FAA. In other lines of business, it has been proven that this type of respite is useful in preventing the formation of questionable relationships that favor one party over another. With regard to the FAA, these types of relationships can have a critical impact on the safety of the aviation system. As such, PASS believes including this directive in the FAA reauthorization bill would greatly benefit the oversight process.

Assignment of Principal Supervisory Inspectors: Principal supervisory inspectors directly interact with the air carrier and have the ability to assign work to aviation safety inspectors and the ultimate authority to make safety-critical decisions. It has been shown that the development of overly “cozy” relationships between the FAA and airlines can result in a breakdown of safety oversight. In fact, in its report, the IG specifically stated that supervisory inspectors should be rotated to ensure reliable air carrier oversight.¹² PASS believes language should be included in the FAA reauthorization legislation that would require the FAA to rotate supervisory principal inspectors between FAA air carrier oversight offices every 5 years.

Headquarters Review of Air Transportation Oversight System (ATOS): ATOS was developed in 1998 as a “system safety” approach to oversight of the air carrier industry aimed at ensuring airlines comply with FAA safety requirements to control risk and prevent accidents. While prioritizing workload based on levels of risk and attempting to manage that workload through automated tasks are valid concepts, there are several problems with ATOS that prevent the agency from benefiting from the system. PASS believes that including language in the FAA reauthorization legislation implementing monthly reviews of the database by a team of employees will enhance the quality of statistical information generated and the overall use of the system. In addition, PASS supports the inclusion of language ensuring that the exclusive bargaining representative of aviation safety inspectors is a member of any such review team.

Improved Voluntary Disclosure Reporting System: The Voluntary Disclosure Reporting Program (VDRP) allows certificateholders operating under Title 14 of the Code of Federal Regulations to disclose voluntarily to the FAA apparent violations of certain regulations. According to the FAA, this policy is intended to encourage compliance with FAA regulations; however, in order for the VDRP to operate successfully, several steps must be rigorously enforced by the FAA. The Southwest incident and other examinations into the process have revealed serious flaws within the system. In order to improve the VDRP system, PASS believes language should be included in the FAA reauthorization bill requiring a supervisor to review and approve all voluntary self-disclosures received by air carriers following the initial inspector paper review. In addition, PASS suggests Certificate Management Offices be required to report quarterly findings to their respective regional division managers. PASS also believes language should be included to clarify that during the verification and evaluation of the report, it is confirmed that the violation has not been previously reported by an inspector or self-disclosed by the carrier.

National Review Team: PASS supports the inclusion of language in the FAA reauthorization bill establishing a National Review Team that will report directly to the associate administrator for aviation safety and will be comprised of air carrier principal inspectors who will perform periodic and unannounced audits of air carrier operations, maintenance practices and procedures to evaluate air carrier oversight.

¹² Department of Transportation Inspector General, *Review of FAA’s Safety Oversight of Airlines and Use of Regulatory Partnership Programs*, AV-2008-057 (Washington, D.C.: June 30, 2008), p. 5.

Use of Non-Certificated Repair Facilities

With airlines increasing their use of outsourced maintenance work, there has been a significant increase in the use of non-certificated repair stations. “Non-certificated” means that the repair facility does not possess a certificate issued by the FAA to operate under Federal Aviation Regulation Part 145 and is therefore not subject to direct FAA oversight. A certificated repair station meets the standards as outlined in the Federal Aviation Regulation and is therefore subject to direct FAA oversight to ensure that it continues to meet those same standards. The differences in regulatory requirements and standards at the two facilities are extremely troubling. For example, in an FAA-certificated repair station, it is required that there be designated supervisors and inspectors and a training program. These items are not required at non-certificated repair facilities.

Effective oversight of non-certificated repair facilities gained attention in the aftermath of the January 2003 Air Midwest crash in Charlotte, N.C. The National Transportation Safety Board determined that incorrect rigging of the elevator system by a contractor contributed to the accident and pointed to “lack of oversight” by Air Midwest and the FAA.¹³ The airline contracted out the work to an FAA-certificated repair station, which then subcontracted to a non-certificated repair facility. Under Federal regulations, the airline is ultimately responsible for ensuring that the work is performed in accordance with FAA standards and requirements.

According to the IG, the FAA does not know how many non-certificated maintenance facilities air carriers currently use, but the IG identified “over 1,400 non-certificated repair facilities performing maintenance and more than 100 of these facilities were located in foreign countries.”¹⁴ The IG also discovered that there are no limitations to the amount of maintenance work non-certificated facilities can provide, and that these facilities are performing far more work than minor services, including much of the same type of safety-critical work FAA-certificated repair stations perform, such as repairing parts used to measure airspeed, removing and replacing jet engines, and replacing flight control motors. Some of these non-certificated facilities are even performing safety-critical preventative maintenance.

Despite the fact that these facilities are performing safety-critical work, FAA oversight is practically nonexistent. In other words, these facilities are performing work pivotal to aviation safety with no guarantee that it is being done in line with FAA and air carrier standards. It is obvious that there must be changes made regarding air carriers’ use of non-certificated repair facilities. PASS is in full support of including language in the FAA reauthorization language requiring that within 3 years all air carrier maintenance work (substantial, regularly scheduled or required inspection items) only be performed by an FAA-certificated repair station.

Oversight of Foreign Repair Stations

FAA aviation safety inspectors responsible for overseeing the certification and recertification of the work performed at foreign repair stations have concerns regarding the oversight of these facilities. Whereas much of this maintenance work was once done at the air carrier’s facility, according to the IG, major air carriers outsourced an average of 64 percent of their maintenance expenses in 2007, compared to 37 percent in 1996.¹⁵ For the most recent report, the IG reviewed nine major air carriers. These carriers sent 71 percent of their heavy airframe maintenance checks—including performing complete teardowns of aircraft—to repair stations in 2007, up from 34 percent in 2003. Foreign repair stations performed 27 percent of outsourced heavy maintenance checks for these nine air carriers in 2007, up from 21 percent in 2003.¹⁶

FAA inspectors at international field offices are charged with certifying foreign repair stations and then recertifying them approximately every 2 years. In addition, FAA inspectors at certificate management offices in this country provide oversight of the maintenance work performed on their assigned air carriers at FAA-certificated foreign repair stations. However, with the increasing amount of work being performed at FAA-certificated foreign repair stations, inspectors have expressed concern that safety issues are not being addressed. In order to ensure the safety of the work performed on U.S. aircraft at foreign repair stations, it is critical that FAA

¹³National Transportation Safety Board, *Loss of Pitch Control During Takeoff, Air Midwest Flight 5481, Raytheon (Beechcraft) 1900D, N233YV, Charlotte, North Carolina, January 8, 2003*, Aircraft Accident Report NTSB/AAR-04/01 (Washington, D.C.: 2004), p. x.

¹⁴Department of Transportation Inspector General, *Aviation Safety: FAA’s Oversight of Outsourced Maintenance Facilities*, CC-2007-035 (Washington, D.C.: March 29, 2007), p.13.

¹⁵Department of Transportation Inspector General, *Air Carriers’ Outsourcing of Aircraft Maintenance*, AV-2008-090 (Washington, D.C.: September 30, 2008), p. 1.

¹⁶*Id.*

inspectors be permitted to physically inspect foreign repair stations at least twice a year.

PASS is aware of an agreement entered into by the United States and the European Community, which has raised concerns regarding the safety oversight of work performed at foreign repair stations by eliminating the role of the FAA inspector to certify and recertify FAA-certificated foreign repair stations. PASS believes that the agreement makes it even more imperative that language be included in the FAA reauthorization legislation allowing FAA inspectors to inspect FAA-certificated foreign repair stations at least twice a year. It is important to note that there is no language contained in the agreement that would prohibit the inspection of all FAA-certificated foreign repair stations at least twice a year by an FAA inspector. In fact, Article 15 of the agreement specifically states that nothing in the agreement shall limit the authority of a party to “determine, through its legislative, regulatory and administrative measures, the level of protection it considers appropriate for civil aviation safety.” Therefore, allowing these two FAA inspections would not in any way impact the terms of the agreement between the United States and the European Community.

The FAA should not have to rely entirely on data submitted by a foreign aviation authority but should be permitted the opportunity to validate the accuracy of such data through FAA inspections of the foreign repair stations. This is especially important when it has been revealed that information provided to the FAA by foreign entities is often found to be incomplete. In fact, according to the IG, foreign authorities do not always provide the FAA with sufficient information on what was inspected and the problems discovered. The IG revealed that inspection documents given to the FAA were found to be incomplete or incomprehensible in 14 out of 16 files (88 percent) examined by the IG. The IG even stated that at least one foreign authority representative said that “they did not feel it was necessary to review FAA-specific requirements when conducting repair inspections.”¹⁷ The questions surrounding the information provided by foreign aviation authorities make it critical that FAA inspectors be permitted to inspect foreign repair stations at least twice per year.

There is also considerable concern over the regulations governing foreign repair stations. For example, as opposed to domestic airline or repair station employees, workers at foreign repair stations are not required to pass drug and alcohol tests. In addition, criminal background checks are not required at foreign repair stations. There also continues to be major concerns regarding security at these facilities, with many of the foreign repair stations lacking any security standards as opposed to those in this country. Domestic repair stations are also required to have at least one FAA-certificated individual at the facility in order to approve an airplane or part for return to service, while this is not a requirement at foreign repair stations.¹⁸ If a foreign repair station wants to perform maintenance on U.S.-registered aircraft or any aircraft that operate in this country, those repair stations should be required to meet the same safety standards as domestic repair stations.

Inspectors represented by PASS inform the union that they continue to find safety issues at both domestic and foreign repair stations. The difference, however, is that FAA inspectors are visiting domestic repair stations on a regular basis, which allows them to address issues in a timely manner. Furthermore, inspectors are even able to make unannounced visits to domestic repair stations. In order to ensure that the work performed at foreign repair stations meets FAA and air carrier standards, PASS believes that all FAA-certificated foreign repair stations should be inspected at least twice a year by an FAA inspector and all workers working on U.S. aircraft should be drug and alcohol tested. Requiring two inspections of FAA-certificated foreign repair stations working on U.S. aircraft should be the minimum standard for this country to protect the work being performed by foreign repair stations. The union supports including such language in the FAA reauthorization legislation.

Conclusion

The work of the highly-trained and skilled employees represented by PASS is essential to protecting aviation safety and fulfilling the agency's mission. PASS and the bargaining unit employees we represent are hopeful that this committee will enact significant legislation that will promote positive labor-management relations, protect the work performed by FAA employees and ensure that safety of the aviation system is always the top priority.

¹⁷ Department of Transportation Inspector General, *Review of Air Carriers' Use of Aircraft Repair Stations*, AV-2003-047 (Washington, D.C.: July 8, 2003), p. v.

¹⁸ U.S. Code of Federal Regulations, Section 145.157.

Senator LAUTENBERG. Thank you. Thank you very much.
Mr. McGlashen.

**STATEMENT OF WILLIAM McGLASHEN, EXECUTIVE ASSISTANT
TO THE INTERNATIONAL PRESIDENT, ASSOCIATION OF
FLIGHT ATTENDANTS—CWA, AFL-CIO**

Mr. McGLASHEN. Thank you, Senator, for giving the Association of Flight—

Senator LAUTENBERG. You're the clean-up hitter.

Mr. McGLASHEN. I'm the clean-up and I've got a great aisle seat.

Thank you, Senator, for giving the Association of Flight Attendants, the world's largest flight attendant union, the opportunity to testify today.

Our President, Pat Friend, regrets that she is unable to be here today but thanks you for holding this important hearing.

Our written testimony details a number of critical issues for the Nation's flight attendants, from the lack of basic OSHA protections to the growing and serious problem of flight attendant fatigue, problems with cabin air quality, and the lack of access to the HIMS Programs for flight attendants.

These are serious issues that the FAA has neglected and in some cases refuses to recognize.

We appreciate the leadership of this Committee particularly and how closely you've worked with us to address these issues and to force the FAA to do its job which is to protect the safety and health of all those that call the aircraft cabin their workplace and the millions of passengers who travel onboard each and every day.

One thing I'd like to highlight that was not included in the previous Senate version but has been included into the current House version of the Reauthorization legislation is the prohibition on the use of cell phones during flight, including the use of Voice Over Internet Protocol which is essentially cell phone-like conversations on laptop computers.

Flight attendants view this prohibition as an important issue that must be addressed from a safety and security perspective. The potential disruption of cell phone conversations onboard in a contained environment proposes potential and serious safety and security risks that can be prevented with a clear and unambiguous elimination on the use of these devices.

I would like to especially highlight the concerns we have with the contamination of aircraft air supply.

For over a decade AFA has been concerned with a number of our members suffering from severe neurological disorders that can be attributed to exposure to certain neurotoxins contained in engine oils and lubricants used in aircraft systems.

The more we have researched the problem, the more clear it has become to us that such contaminated air poses a direct threat to flight safety. Almost all aircraft models use a system called a "bleed air system" to provide fresh air to the cabin. This air has to be heated before being pumped into the aircraft and is done so by bleeding the air off the engines.

If there's an engine oil or hydraulic fluid leak, these chemicals are heated and broken down to their most basic chemical composi-

tions. Many of these include a chemical referred to as TCP, a dangerous neurotoxin.

Evidence continues to mount that this chemical is indeed being pumped into the aircraft cabin. Accounts from crew members, including pilots, have come forward about the frequency of this exposure and the risk it poses.

Crew members have reported becoming incapacitated after experiencing engine oil leaks, mist and smoke in the cabin. In a review of available data, AFA-CWA has documented seven air quality incidents each month over a nine-month period at one airline. That involved both smoke and mist in the cabin.

AFA-CWA also found that over an 18-month period there were 470 air quality events in the U.S. among 47 aircraft types. Globally, the U.S. Flight Safety Foundation estimates that there are 5 to 10 diversions per day due to smoke and/or fumes in the aircraft.

Finally, AFA believes that this FAA Reauthorization process provides a sound platform to begin a comprehensive discussion on developing a national and rational aviation policy for our country.

This legislation addresses some immediate and indeed some long-term needs and that is appropriate, but the larger conversation must take place on how we build a 21st Century aviation policy for our country and it's a conversation that is long overdue.

For instance, AFA is pleased to see increased funding for the Essential Air System in the House bill and hopes that the Senate follows. Small and even mid-sized communities are the first casualties when airlines cut capacity, leaving a trail of wasted infrastructure investments and unemployment for thousands of aviation workers.

It is essential to make a bold policy statement that service to all communities is important in our country. This is the type of discussion and policymaking that needs to occur, frankly, on a broader stage.

This, along with provisions that address the issue of foreign ownership and control of our domestic airlines, are important in protecting U.S. workers and consumers alike.

Mr. Chairman, Senator Lautenberg, today's hearing serves two purposes in my view. First, the Association of Flight Attendants endorses this bill and urges you to ensure that the provisions banning the use of cell phone use on the aircraft and steps to end the FAA's decades-long policy of ignoring the serious risks posed by contaminated aircraft bleed is included in this vital legislation.

Second, this legislation provides a long overdue platform again for formulating a national and, indeed, rational aviation policy. In this season of change, this is our opportunity to construct a 21st Century aviation policy that works for passengers, communities and the union men and women who each and every day transport a number of passengers equal to the size of the City of Chicago.

It's time that millions of aviation workers are part of this process and this debate on our national aviation policy and we look forward to working with you to ensure that this happens.

Thank you for your time and I look forward to your questions.
[The prepared statement of Mr. McGlashen follows:]

PREPARED STATEMENT OF WILLIAM MCGLASHEN, EXECUTIVE ASSISTANT TO THE
INTERNATIONAL PRESIDENT, ASSOCIATION OF FLIGHT ATTENDANTS—CWA, AFL—CIO

Thank you, Chairman Dorgan, for giving us the opportunity to testify today. My name is William McGlashen and I am the Executive Assistant to the International President of the Association of Flight Attendants—CWA (AFA—CWA), AFL—CIO. President Friend regrets that she could not be here today and sends her best wishes and thanks. AFA—CWA represents over 55,000 flight attendants at 20 different airlines throughout the United States and is the world's largest flight attendant union. Flight attendants, as the first responders in the aircraft cabin, have a unique perspective on a number of the safety programs of the Federal Aviation Administration (FAA) and we are pleased to have a seat here today to discuss many of the issues which remain for the FAA to address.

Our testimony today does not differ much from that given almost 2 years ago when this Committee began work on the FAA Reauthorization legislation. I applaud this Committee for the good work done on that bill and your efforts to clear that legislation. Unfortunately, I'm here to tell you that not much has changed in the past 2 years. The FAA has continued to fail to take action on several fronts to improve the overall safety and health of the employees that work under its jurisdiction. We firmly believe that the FAA's mentality of denial and delay toward these serious health and safety issues only threaten the overall safety of the aviation system for the traveling public as well. That is why the continued vigilance and oversight of the FAA by the members of this Committee is necessary and vital. We look forward to working with this Committee in the coming weeks as you work toward passing a comprehensive FAA Reauthorization bill to address a number of the matters we will highlight today.

Flight Attendant Fatigue

We all know that the FAA's failure to address the growing problem of fatigue for numerous aviation industry workers—not just flight attendants, but pilots and air traffic controllers as well—could lead to an incident resulting in the loss of many lives. I know that you have heard from our brothers and sisters at ALPA and NATCA about their ongoing concerns with the FAA and its inability to address fatigue amongst their members. I am here to tell you that fatigue is a very real and serious concern for the flight attendant workforce in this country as well. As the deep concessions demanded of flight attendants during the recent and ongoing financial turmoil of the airline industry have taken hold, it has become clear that airline management hopes to keep our members working for as long as possible with greatly reduced time off between duty. Some air carriers are routinely taking advantage of a "reduced rest" provision in the Federal Aviation Administration's Flight Attendant Duty Time and Rest Regulations which allows the minimum rest of 9 hours to be reduced to 8. The exception has become the rule and flight attendants are so exhausted that they have informed us that they have in some cases forgotten to perform critical safety functions, including the arming of doors and even fallen asleep on the jumpseats. Even more troubling is that the FAA continues to allow the carriers to schedule reduced rest periods, making them more routine, and has failed to recognize or show any concern for the impact that flight attendant fatigue has on the overall safety of the aviation system.

Multiple studies have shown that reaction time and performance diminishes with extreme fatigue—an unacceptable situation for safety and security sensitive employees. Flight attendants are required to be on board to assist in case an aircraft emergency evacuation is necessary. In addition, they are inflight first responders who are trained to handle inflight fires, medical emergencies including CPR and emergency births. Furthermore, since 9/11 the security responsibilities of flight attendants have greatly increased. It has become even more important for flight attendants to be constantly vigilant of the situation in the aircraft cabin and aware of their surroundings at all times. An inability to function due to fatigue jeopardizes the traveling public and other crewmembers.

According to the Federal Aviation Regulations (FAR's), flight attendants must have a minimum rest period of at least 9 hours following any duty period of less than 14 hours. The nine-hour period can be reduced to as little as 8 hours, if the employer schedules a 10-hour rest period following the next duty period. I'd like to make a further clarification at this point. Using the term "rest period" can be misleading because much more must be done during this period of time other than simply sleeping. The "rest period" can begin as soon as fifteen minutes after an aircraft pulls into the gate and continues until one hour prior to their next departure. This "rest period" must also include travel through an airport, waiting time for a shuttle to the layover hotel, travel to the hotel, checking-in, possibly finding time to eat a

meal since many of our carriers in an effort to cut costs have removed flight attendant crew meals from the flights, getting prepared for bed, getting dressed and prepared for work the next morning, travel back to the airport and last, but certainly not least is sleep time. Our members are continually reporting that the actual sleep time this schedule allows is in many cases between only 3–5 hours of actual sleep before beginning another full duty day.

The airline industry practice has been to schedule as little as 9 hours of rest for flight attendants. It is our understanding that the reduced rest period provision was originally meant to accommodate “day of” scheduling when carriers encounter delays out of the carriers’ control such as bad weather or air traffic control delays. The FAA has chosen to ignore the routine implementation of this provision by airline management and the further erosion of meaningful rest periods for flight attendants. To further highlight the FAA’s turning of a blind eye to this practice, an FAA spokesperson, in response to a question from the media on this issue stated, “The FAA rules on flight time and rest for both pilots and flight attendants are fundamentally sound. They serve aviation safety very well.” We fundamentally disagree.

Congress also has expressed concerns. The Omnibus Appropriations for FY 2005 contained an appropriation for \$200,000 directing the FAA to conduct a study of flight attendant fatigue. The FAA was to report back to Congress by June 1, 2005 with their findings. The report language stated: “The Committee is concerned about evidence that FAA minimum crew rest regulations may not allow adequate rest time for flight attendants. Especially since the terrorist attacks of September 11, 2001, the Nation’s flight attendants have been asked to assume a greater role in protecting the safety of air travelers during flight. Current flight attendant duty and rest rules state that flight attendants should have a minimum of 9 hours off duty that may be reduced to 8 hours, if the following rest period is 10 hours. Although these rules have been in place for several years, they do not reflect the increased security responsibilities since 2001, and only recently have carriers begun scheduling attendants for less than 9 hours off. There is evidence that what was once occasional use of the ‘reduced rest’ flexibility is now becoming common practice at some carriers.”

The FAA delayed release of the report for over one year, even though the study itself was completed. The FAA repeatedly ignored requests from AFA-CWA and Members of Congress to release the report and explain the delay in reviewing the study by the Administrator’s office. Finally, after AFA-CWA staged an all night “sleep-in” by flight attendants in front of the FAA headquarters in order to draw attention to the issue, the FAA released the report.

In order to complete the required study, representatives of the FAA from the Civil Aerospace Medical Institute (CAMI) initiated an agreement with NASA Ames Research Center to perform an evaluation of the flight attendant fatigue issue. Due to the short internal deadline for conducting the report, the researchers were unable to conduct a thorough and comprehensive study of flight attendant fatigue. It primarily consisted of a review of existing literature on the issue, an evaluation of flight attendant duty schedules and a comparison of those schedules to the current regulations regarding rest. Based just on this limited research, *the report concluded that flight attendants are “experiencing fatigue and tiredness and as such, is a salient issue warranting further evaluation.” They also stated that “not all the information needed could be acquired to gain a complete understanding of the phenomenon / problem of flight attendant fatigue.”*

The report listed a number of recommendations for further study. They were:

1. A scientifically-based, randomly-selected survey of flight attendants as they work. Such a study would assess the frequency with which fatigue is experienced, the situations in which it appears, and the consequences that follow.
2. A focused study of aviation incident reports in order to determine what role fatigue played in already reported safety incidents.
3. The need for research on the effects of fatigue. This research would explore the impact that rest schedules, circadian factors and sleep loss have on flight attendants’ ability to perform their duties.
4. The determination and validation of fatigue models for assessing how fatigued a flight attendant will become. Developing a reliable fatigue modeling system would be an important tool for the aviation industry in helping to determine when rest periods should be scheduled.
5. A study of International policies and practices to see how other countries address these issues.

6. Development of training material to reduce the level of fatigue that may be experienced by flight crews and to avoid factors that may increase fatigue levels.

Based on this limited report and its recommendations, Congress included funding for a continuation of the study and for CAMI to act on these recommendations for further study and to continue their research on this important aviation safety issue in the Consolidated Appropriations Act 2008. The legislation called for CAMI to complete the study and report back to Congress by the end of 2009.

Unfortunately, the airlines have attempted to stonewall this Congressionally-mandated study by refusing to provide to the CAMI researchers contact information for flight attendants. Fortunately, by working with flight attendant unions and the FAA flight attendant certification database, the researchers were able to get their initial information sent to flight attendants. Currently, we are communicating with the research team and providing them with information as needed. The study is progressing and is in the field engaged in extensive research. Because of airline management's earlier stonewalling as well as delays resulting from the change in Administrations, it appears that the CAMI research team will need additional time to complete work on the study. We encourage the Committee to extend the deadline for the report to Congress on the research an additional 6 months.

Furthermore, we believe that based on the FAA's clearly stated belief that "... rules on flight time and rest for both pilots and flight attendants are fundamentally sound," and their demonstrated efforts to stonewall and delay release of the initial report, along with the carriers efforts to stymie the study, Congress must provide firm and strong guidance to the FAA to address this growing problem to aviation safety.

Workplace Safety and Health Protections

For well over 30 years AFA-CWA has been fighting for even the most basic workplace safety and health protections for flight attendants. Those pleas have continued to fall on deaf ears at the FAA. Flight attendants encounter numerous occupational hazards while working aboard commercial flights, including but not limited to turbulence, severe air pressure changes, unwieldy service carts, broken luggage bins, balky exit doors and door handles, exposure to toxic chemicals mixed with the engine air that is bled into the passenger cabin, unruly passengers, communicable diseases and emergency evacuations. These hazards cause flight attendants to suffer occupational injuries and illnesses at rates far in excess of those experienced by workers in almost every other sector of private industry, as is evident from an analysis of survey data available from the U.S. Bureau of Labor Statistics (BLS). For example, occupational injury and illness rates among flight attendants and all scheduled air transport workers are historically several times greater than the rates for all private industry workers; and even significantly greater than the rates experienced by construction workers.

With respect to specific characteristics of injuries and illnesses experienced by flight attendants, detailed in data from the BLS surveys reveal that:

- Overexertion, contact with objects/equipment, exposure to harmful substances/environments, and falls are the most significant exposure events;
- Approximately 90 percent of injuries are traumatic in nature, and include sprains/strains/tears, effects of air pressure, and bruises and contusions;
- All body parts are affected, but injuries/illnesses to the trunk, head and extremities predominate.

1975 FAA Assertion of Jurisdiction over Crewmember Health and Safety

The reason that flight attendants continue to experience such high rates of injuries, is that flight attendants are not covered under the Occupational Safety and Health Act (OSHA) nor has the FAA made any effort to regulate the safety and health of flight attendants in the aircraft cabin. On July 10, 1975, the FAA published a statement in the Federal Register (40 Fed. Reg. 29114, 1975) asserting complete and exclusive jurisdiction over crewmember health and safety on "civil aircraft in operation . . . from the time it is first boarded by a crewmember, preparatory to a flight, to the time the last crewmember leaves the aircraft after completion of that flight, . . . even if the engines are shut down." In asserting such jurisdiction over crewmember health and safety, the FAA claimed that "with respect to civil aircraft in operation, the overall FAA regulatory program . . . fully occupies and exhausts the field of aircraft crewmember occupational safety and health."

Since 1975, the FAA has continued to assert complete and exclusive jurisdiction over crewmember health and safety aboard a civil aircraft; unfortunately, at all relevant times since 1975, the FAA has *declined* to exercise its asserted statutory au-

thority to prescribe or enforce standards or regulations affecting the occupational safety and health of crewmembers. Significant areas of regulatory neglect include, but are not limited to, recording and reporting of occupational injuries and illnesses; blood borne pathogens; noise; sanitation; hazard communications; access to employee exposure and medical records, and anti-discrimination protections for reporting safety and health violations.

1990 AFA Petition of Rulemaking

After years of inaction by the FAA, on May 8, 1990, AFA-CWA filed a petition for rulemaking with the FAA that asked the agency to adopt selected OSHA safety regulations and apply them to the crewmembers working in the airline industry, addressing such areas as the recording and reporting of injuries; access to employee exposure and medical records; right to inspections; safety definitions; the handling of hazardous materials; personal protective equipment; medical and first aid; fire protection, and toxic and hazardous substances. In submitting its petition, AFA-CWA was attempting to fill the void created when the FAA asserted jurisdiction over crewmember health and safety without actually exercising that authority. As AFA-CWA stated in its petition:

This petition offers one solution to the gaps in crewmember health and safety coverage caused by the FAA's *de facto* industry-wide preemption of OSHA. Although this industry-wide preemption is probably incorrect as a matter of law, it is the rule currently followed by OSHA and the FAA, with the possible exception of OSHA's recordkeeping requirement. If the FAA is going to claim total jurisdiction over crewmembers, it should *exercise* that jurisdiction by providing protections equal to those provided by OSHA. It is for that reason that this petition asks the FAA to adopt the OSHA regulations and apply them to crewmembers. (Emphasis added).

FAA Rejection of AFA-CWA Petition for Rulemaking

Almost seven (7) years after AFA-CWA filed its petition for rulemaking, the FAA finally responded by letter dated June 6, 1997, in which it stated in part:

The FAA has determined that the issues identified in your petition may have merit but do not address an immediate safety concern. Because of budgetary constraints, and the need to meet the demands of a changing aviation industry and a complex air transportation system, the FAA finds that it must dedicate its rulemaking resources to the most pressing problems and issues associated with safety. For these reasons, we are unable to consider your petition for Rulemaking; therefore it is declined.

August 7, 2000 Memorandum of Understanding between FAA and OSHA

On August 7, 2000, after increased pressure from AFA-CWA, the FAA and OSHA entered into an historic Memorandum of Understanding (MOU), the purpose of which was "to enhance safety and health in the aviation industry." In the MOU, FAA and OSHA agreed to establish a joint team (FAA/OSHA Aviation Safety and Health Team or Joint Team) to identify the factors to be considered in determining whether the OSH Act's requirements could be applied to the working conditions of employees on aircraft in operation (other than the flight deck crew) without compromising aviation safety.

The MOU required the Joint Team to produce a first report within 120 days from the date of the MOU's execution that addressed whether and to what extent OSHA's existing standards and regulations with respect to six (6) specific health and safety areas could be applied to employees on aircraft in operation, without compromising aviation safety. In December 2000, the first report of the FAA/OSHA aviation safety and health team concluded that, with the exception of bloodborne pathogens and noise, the other five (5) subject areas under consideration could be implemented for all employees in the aviation industry without implicating aviation safety concerns. Those five subject areas are recordkeeping, sanitation, hazard communication, anti-discrimination and access to employee exposure/medical records. With respect to bloodborne pathogens and noise, the report found that the "OSHA requirements that necessitate engineering and administrative controls may implicate aviation safety and would need to be subject to FAA approval."

The report also proposed that the team give further consideration to establishing "a procedure for coordinating and supporting enforcement of the OSH Act with respect to working conditions of employees on aircraft in operation (other than the flight deck crew) and for resolving jurisdictional questions." Although the December 2000 report recommended that the Joint Team continue to meet to resolve this and other issues, the team did not meet again until January 2002, at which time they

could not agree on a timeline for implementation of relevant OSHA regulatory standards for employees on aircraft in operation.

September 2001 Report of the Office of Inspector General of the DOT

In September 2001, the Office of the Inspector General (OIG) for the Department of Transportation (DOT) issued a report titled: "Further Delays in Implementing Occupational Safety and Health Standards for Flight Attendants Are Likely" (the OIG Report). The OIG review was requested by a distinguished member of this Committee, Representative Peter DeFazio, who expressed concerns over the dearth of OSHA standards for airline employees in the areas of bloodborne pathogens, repetitive motion injuries, noise, and unhealthy cabin air.

The OIG Report found that in the 26 years since the FAA asserted statutory authority for prescribing and enforcing occupational safety and health standards for aircraft crewmembers onboard aircraft;

. . . it has not issued industry standards to address employee safety and health issues associated with working conditions onboard aircraft in operation. Instead, FAA focused its resources on providing and enforcing industry standards for aircraft design and operational problems affecting safety.

Furthermore, the OIG Report concluded that "unless FAA and OSHA resume working together, we have no confidence that industry standards will be issued in the near future to address occupational hazards." Accordingly, the OIG Report recommended that within 90 days of the issuance of its report,

FAA in conjunction with OSHA should establish milestones for the completion of work begun under the August 2000 MOU, and address the occupational safety and health concerns identified in the December 2000 joint report. Within this timeframe, FAA should also reinstitute its rulemaking procedures on injury and illness recordkeeping and reporting, which FAA can do without OSHA's assistance. This is necessary in order to identify the types and frequency of injuries and illnesses occurring. If FAA implements our recommendations, it will in our opinion, be a clear sign of forward progress. We will advise the Secretary of Transportation and the Congress of FAA's actions. *If these recommendations are not implemented, it will, in our opinion, be apparent that after 25 years of limited progress, an alternative approach will be necessary. One approach would be to revoke FAA's exclusive authority to provide occupational safety and health standards for employees in aircraft, and have this function performed by OSHA. FAA would then intervene in any regulatory proceedings, when in FAA's judgment, a proposed OSHA regulation would negatively affect the safety of air traffic operations.* (Emphasis added).

To date, although the FAA/OSHA Aviation Safety and Health Team met on several occasions since the September 2001 publication of the OIG Report, the FAA and OSHA have taken no steps to implement the recommendations of the OIG Report, or in any other way regulate the workplace health and safety of flight attendants.

Aviation Safety and Health Partnership Program

The FAA took one final step toward complete abandonment of its August 2000 MOU with OSHA when it announced on March 4, 2003, that it was creating the "Aviation Safety and Health Partnership Program" (ASHPP). In an announcement in the Federal Register (68 Fed. Reg. 10145, 2003), the FAA claimed that the ASHPP was being created to provide "empirical data concerning injury and illness hazards on aircraft in operation" to allow air carriers to "voluntarily" provide "selective" safety and health protections for "employees not covered by OSHA." In addition, the FAA announced that the ASHPP

would preserve the FAA's preeminent authority over aviation safety issues by reserving to the FAA complete and exclusive responsibility for determining whether proposed abatements of safety and health hazards would compromise or negatively affect aviation safety. The ASHPP would include electronic web-based procedures for air carriers to report employees' injury and illness information, thereby enabling FAA to obtain the required data. This data will be used to determine if FAA should take additional measures, including rulemaking activities, to address safety and health issues in air carrier operations.

On March 31, 2003, AFA-CWA, along with many of the other affiliated unions of the Transportation Trades Department (TTD) of the AFL-CIO, wrote to the FAA Flight Standards Service informing them that the TTD unions were "disappointed with and angered by the FAA's decision to create a voluntary program that will halt the progress we have made over the years toward providing the Nation's flight at-

tendants with the Federal safety and health protections they need and deserve.” Furthermore, the TTD wrote that it was troubled by the “fact that the ASHPP proposal relies solely on voluntary measures, with no underlying regulatory requirements or enforcement provisions.”

Since its inception, the ASHPP has failed to propose or institute procedures, rules or guidelines for carriers to follow to improve airline employee health and safety protections. As a result of the voluntary nature of the ASHPP, air carriers have instituted no improvements to reduce or mitigate flight attendant injuries. As a direct result of the FAA’s failure to exercise its asserted statutory authority, flight attendants are substantially more likely to be injured on the job than employees in other industries.

AFA-CWA Lawsuit Filed in U.S. District Court

On September 19, 2005, AFA-CWA filed a complaint in the United States District Court for the District of Columbia against the Secretary of Labor and the FAA Administrator. The AFA-CWA complaint asked the court to issue an order declaring that the FAA has failed to exercise its asserted jurisdiction to establish occupational health and safety standards for flight attendants and crewmembers, and, as a result, the Secretary of Labor failed to fulfill her statutory duty under the OSH Act to ensure healthy and safe working conditions for flight attendants. On May 22, 2006, the District Court dismissed AFA-CWA’s complaint for lack of subject matter jurisdiction; On January 10, 2007, AFA-CWA filed an appeal brief; on February 9, 2007, the FAA filed an appeal brief; on February 23, 2007, AFA-CWA filed a reply brief; and on March 26, 2007, oral arguments were heard before the District of Columbia Circuit Court of Appeals. In 2007, the D.C. Circuit Court of Appeals affirmed the district court’s dismissal of AFA’s suit to compel the Dept. of Labor to apply OSHA workplace standards on the FAA. The Appeals court found that the court did not have jurisdiction to hear AFA’s suit.

In light of the continued stonewalling on the part of the FAA to act on behalf of the safety and health of flight attendants and its obvious attempts to totally disavow the 2000 MOU, we believe that it is time for Congress to act in order to force the FAA to relinquish the exclusive jurisdiction that it has claimed, without any subsequent action, for over 30 years.

Aircraft Cabin Air Quality

The issue of poor aircraft cabin air quality and in many cases the contamination of the air supply by potentially toxic chemicals continues to pose a threat to those that work onboard the aircraft as well as those that travel onboard the aircraft. At the heart of the failure of the U.S. Federal Aviation Administration (FAA), the manufacturers, and the airlines to *resolve* problems with aircraft air quality is their failure to *acknowledge* problems with aircraft air quality. There are no standards for protective measures or access to information necessary to prove individuals’ cases; there is effectively no government oversight, allowing the steady flow of “anecdotal” reports to be dismissed as unreliable, and therefore irrelevant.

It is no small task to describe and document problems with air quality on aircraft; hence, the length of this submission. The problems are varied, but the lack of oversight and protective measures is common to all and is in desperate need of remedy. Here, seven problems with aircraft air quality are described in detail. The highlights are described here:

Inadequate ventilation. In buildings, owners must meet minimum ventilation standards intended to protect occupant health and comfort. On aircraft, there is no ventilation standard, despite the fact that aircraft are the most densely occupied of any environment. In buildings, workers can request an OSHA investigation of indoor air quality. On aircraft, there is no government body assigned to investigate related illness reports. Further, there are no protections in place for flight attendants assigned to fly to areas affected by Severe Acute Respiratory Syndrome (SARS), even though crewmembers do not have the option of “postponing non-essential travel.” The World Health Organization recognizes flight attendants as potential “close contacts”; the Centers for Disease Control and Prevention does not.

Polluted air supply on the ground. Exhaust fumes and heated de-icing fluids can be ingested into the air supply systems, especially during ground operations.

Exposure to heated oils and hydraulic fluids. Heated oils and hydraulic fluids can leak or spill into the air supply systems during any phase of flight, potentially exposing passengers and crew to carbon monoxide and neurotoxins, such as tricresylphosphates (TCPs). There are almost no protective measures in place to prevent air supply contamination, and contaminated aircraft can be—and

are—dispatched as “airworthy.” Chronic or even permanent neurological damage can result, although affected passengers and crew have little recourse without any record of air monitoring or access to maintenance records. Pilot incapacitation is an additional risk. The FAA has shown no signs that it plans to follow the recent National Research Council committee recommendation for requisite carbon monoxide monitoring on all flights.

Reduced oxygen in the ambient air during flight. During flight, the aircraft cabin is maintained at a reduced pressure, generally equivalent to an altitude of 6,000–8,000 feet, although sometimes higher. At an effective altitude of 8,000 feet, the supply of oxygen is reduced by 25 percent relative to sea level. There is evidence that the current “8,000 feet standard”, first issued in 1957, is based not on health, but on operating costs, and that the reduced oxygen supply may be inappropriately low for a substantial portion of the flying public.

Inadequate attention to the thermal environment. Providing air nozzles (“gasps”) at each occupant seat and work area allows flight attendants and passengers to adjust the temperature of their environment. This is especially important in areas where flight attendants are physically active. In addition, flight attendants regularly report that the galleys and jumpseats located near the aircraft doors can be uncomfortably cold at ankle level, presumably because the doors are poorly insulated. A standard that defines a target temperature range and maximum vertical and horizontal temperature differentials would address this problem. Door heaters have already proven an effective and practical remedy.

Exposure to ozone gas. Symptoms associated with ozone exposure are well documented and include respiratory distress and increased susceptibility to infection. Ozone levels increase with altitude and latitude, and are highest in the late winter and early spring. The exposure limit for ozone cited in the Federal Aviation Regulations is 2.5 times higher than the workplace limit set by the National Institute for Occupational Safety and Health. Airlines are under no obligation to monitor or record ozone levels in the cabin.

Exposure to potentially high concentrations of pesticides. Some countries require that incoming aircraft are sprayed with pesticides to kill any insects that may be on board and may carry disease. The pesticides are applied in occupied or soon-to-be-occupied aircraft cabins without any measures to inform or protect the health of passengers or crew. Reported symptoms range from sinus problems and rash to anaphylactic shock and nerve damage. Differences in exposure levels and individual susceptibilities are described. The U.S. Department of Transportation’s investigation into the feasibility and efficacy of non-chemical methods to keep aircraft cabins insect-free must be actively supported.

Years of research and documentation have led to further evidence that contamination of the aircraft air supply by dangerous chemicals such as TCPs pose a direct and potentially serious threat to flight safety. Pilots have reported becoming incapacitated after experiencing engine oil leaks and mist and smoke in the aircraft. In a review of available data, AFA-CWA has documented 7 air quality incidents involving smoke or mists in the aircraft a month over a nine-year period at one airline. AFA-CWA also found that over an 18-month period, there were 470 air quality events in the U.S. involving 47 aircraft types. Globally, the U.S. Flight Safety Foundation estimated that there are 5–10 diversions per day due to smoke and/or fumes in the aircraft. Clearly there is a problem that poses a direct and serious threat to everyone onboard the aircraft. While the concerns about the long-term health impact of repeated exposure to these chemicals remain a serious one, the potential risk they pose to pilot incapacitation and potential in flight safety risks is even a more serious one.

Most recently, this problem came to light in the media when twin sisters on a Southwest Airlines flight that was diverted to Albuquerque, New Mexico reported difficulty breathing on the flight and a mist coming through the air system developed serious health issues. These two women have reported many of the same health issues that AFA-CWA has found in our members that have been exposed to these dangerous neurotoxins in the aircraft.

It is imperative that the members of this Committee keep the FAA focused on addressing this serious issue and supporting vital research that will help clarify and solve this ongoing problem. It is also important that the Committee assist in preventing airline management from stonewalling efforts to conduct vital studies of and efforts to address aircraft cabin air quality.

Flight Attendant English Language Standards

AFA-CWA believes that it is long past due for an English language regulatory standard for flight attendants that is similar to the existing standard for pilots, flight engineers and security personnel. The FAA requires flight attendants onboard most commercial flights to protect the safety and security of the cabin and the passengers. Effective communication is essential to fulfilling these responsibilities.

Virtually every type of safety, security or health-related cabin emergency requires effective communication with other flight attendants, with passengers and with the flight deck crew. For example, if there is a fire in the galley, the flight attendant must clearly, quickly and completely explain the problem to the flight deck so the captain in command can make the appropriate decision(s). In addition, the cabin crew needs to be able to coordinate the emergency response by clearly communicating with each other, as well as, to the passengers. In the event of an emergency, flight attendants would need to brief able bodied passengers to assist in an evacuation. It is crucial that the passengers completely understand the briefing and actions they would be expected to perform. Clear, distinct, and audible directions and commands are essential in the process of evacuating an aircraft. It is imperative that during an emergency the entire crew work as a team to prepare for or respond to an emergency in the cabin.

The FAA has been working on developing an English language proficiency standard for over a decade. In April 1994, the FAA issued an Advanced Notice of Proposed Rule Making (ANPRM) on Flight Attendant English Language Docket No. 27694; Notice No. 94-11. "The FAA is considering rulemaking to establish requirements to ensure that flight attendants understand sufficient English language to communicate, coordinate, and perform all required safety-related duties. If the FAA actually proposes such a requirement, it would be comparable to regulatory requirements for other crewmembers and dispatchers. Improvements in communication, coordination, and performance of required safety-related duties that may result from this regulatory process would benefit crewmembers and passengers."

In February 1996, the FAA announced the formation of an Aviation Rulemaking Advisory Committee (ARAC) to dispose of the comments made to the 1994 ANPRM No. 94-11 and recommend an appropriate rulemaking action (*e.g.*, NPRM, withdrawal) or if advisory material should be issued. Represented on the group were representatives from various flight attendant unions and airlines. Midstream of the ARAC process the FAA withdrew the ANRPM stating that any possible rulemaking on the subject would be incorporated into the overall context of a crew training rulemaking project currently being developed internally at the FAA. This all, despite the ARAC working group voting 11-2 that an NPRM should be developed and 10-2 that an Advisory Circular should also be developed to provide guidance on implementation of such a rule.

In 2004, the Crewmember/Dispatcher Qualification Aviation Rulemaking Committee (ARC) was tasked with finishing the training rulemaking project that was started in 1997. The proposed new regulatory section provides an English Language requirement for all crewmembers, including flight attendants, to help ensure that crewmember communication is in accordance with crew resource management objectives and that flight attendants can communicate with passengers. This rulemaking was recently published and currently open for comments. The ARC *proposed* the following language to the FAA:

English language requirement

No certificate holder may use any person nor may any person serve as a pilot, flight engineer, or flight attendant under this part, unless that person has demonstrated to an individual qualified to evaluate that person under this part, the ability to do the following:

- (a) Read, write, speak and understand the English language.*
- (b) Have their English language speech and writings understood.*

AFA-CWA hopes that Congress will push the FAA to ensure that proposed language on an English language regulatory standard for flight attendants becomes mandatory.

Carry-on Baggage Limitations

AFA-CWA strongly urges legislation which would direct the Transportation Security Administration (TSA) and the Federal Aviation Administration (FAA) to issue regulations that would set a limit on carry-on baggage that may be brought on an airplane. Current guidelines for carry-on bags were established more than two decades ago when air travel was much different than today. Carriers had to have individual programs to control the weight, size and number of carry-on bags. This cre-

ated a maze of varying carrier programs making it difficult and confusing for passengers. This individual program philosophy is still in force today. Furthermore, the recent actions taken by most airlines to charge a fee for checked baggage has resulted in an increase in the size and number of items being brought onboard and into the passenger cabin.

AFA-CWA has filed two petitions for rulemaking requesting the FAA to enhance their carry-on baggage rule, citing incidents involving carry-on bags that range from disruption in the cabin, delays in boarding and deplaning, physical and verbal abuses of flight attendants and passenger, and injuries and impediments to speedy evacuations. Despite these two requests for rulemaking, the FAA has failed to establish a specific requirement regarding size and number of carry-on bags allowed stating the FAA simply provides guidance to carriers on how to establish their programs. According to the FAA, this allows the carriers flexibility to create a program that fits their individual unique operations.

The September 11 terrorist attacks underscored the need for a comprehensive effort to improve security and further supported the need for a tighter limit on carry-on baggage. Reducing the size and number of carry-on bags would ultimately enhance security screening by reducing the number of bags that need to be screened and reducing the volume of the individual bag, both of which would allow for a better, clearer, uncomplicated e-ray image.

The concept of limiting the size, type and amount of carry-on baggage is nothing new and was recommended by an FAA Aviation Security Advisory Committee in 1996. International countries and bodies, such as the European Union (EU) which represents 25 member states, also recognize the security enhancements relative to limiting the number and size and have adopted a new rule effective April 2007 that would limit passengers to one carry-on item with a size limit of 56 cm by 45 cm by 25 cm (22 in by 17.75 in by 9.85 in approx).

FAA and Transportation Security Administration (TSA) recognizing the necessity to limit carry-on baggage both issued guidance to carriers that limited passengers to one carry-on bag and one personal bag (such as a purse or briefcase). These restrictions are loosely enforced and neither agency is very explicit in their information to the public regarding the limit. In fact, the TSA website no longer even mentions the limit of one carry-on and one personal bag.

AFA-CWA will continue to fight for clear and concise limits on the number and size of carry-on bags to ensure continued enhancement of security and safety for the traveling public.

Human Intervention Management Study (HIMS)

Flight attendants and pilots work under nearly identical and strict regulations of the DOT and FAA regarding drug and alcohol abuse. Both groups are subjected to drug and alcohol testing on a random basis; following a serious aircraft accident or incident; or based on suspicion of co-workers and supervisors.

However, there is one major difference: Pilots who test positive for prohibited substances have access to a rehabilitation and recovery process called Human Intervention Management Study (HIMS) and, if a pilot complies with the recovery program, he/she may return to flying. On the other hand, flight attendants who test positive are terminated quickly and have little to no access to treatment making recovery improbable. It is time for the FAA to institute a HIMS program for the Nation's flight attendants.

HIMS was formed and funded in 1992 by Congress, is administered by the FAA, and provides a comprehensive education and training program for alcohol and drug abuse prevention in the airline industry. Congress has appropriated approximately \$500,000 to fund HIMS.

The success of HIMS for pilots is well-documented and provides a glimpse at the potential assistance this worthy program can provide for flight attendants. Over 3,500 pilots have been returned to the flight deck through their own efforts with the support of the HIMS program. Importantly, over 57,000 pilots and their families at 47 carriers have received preventative educational services from the HIMS program.

Flight attendants earn their wings by first passing a company training program which includes mandatory FAA training requirements. The FAA orders that flight attendants pass proficiency tests during training. Training records and test results are a part of a flight attendants permanent personnel file and can be accessed at any time by management and by the FAA in post-serious aircraft incident and/or accident investigations. Following successful completion of the initial training course, the FAA issues a certificate to the flight attendant who must attend ongoing training courses and pass proficiency tests to remain certified each year throughout her/his career. Flight attendants are also subject to unannounced inspec-

tions by FAA Cabin Safety Inspectors and are subject to FAA enforcement action for non-compliance with FAA regulations.

This FAA oversight of flight attendants is nearly identical to the way in which the FAA governs and enforces Federal regulations concerning other aviation professionals such as pilots and mechanics. Therefore, an effective HIMS program will provide parity for flight attendants and their aviation industry colleagues.

According to Employee Assistance Program (EAP) experts, flight attendants are at greater risk for developing addiction diseases because they may be exposed to multiple traumatic and near-traumatic incidents while on the job. As the first responders in cabin safety and security incidents, flight attendants, like other emergency response professionals who experience traumatic incidents, can become vulnerable to substance abuse.

Company-sponsored employee assistance programs are valuable, but limited, in their scope. They offer intervention with troubled employees by training supervisors to refer workers with observable performance problems for help. Unfortunately, these programs have a narrow capacity to identify "at risk" flight attendants simply because the vast majority of the time, a flight attendant is unsupervised, working in a distant environment at 30,000 feet.

HIMS can provide a safe harbor for flight attendants, as it does for pilots, who want to report fellow crewmembers they suspect of having an abuse problem. In a largely unsupervised work environment, fellow flight attendants are often the first to suspect and/or recognize substance abuse patterns of a co-worker. But currently, the practice of alerting management to a flight attendant that may be struggling with an addiction is the fast track to her/his unemployment with no health benefits to count on for help.

HIMS can prevent a wasteful human toll and can produce cost efficiencies at airlines that effectively promote and utilize the HIMS model. A HIMS model for flight attendants could save substantial training costs for carriers that currently have to hire new flight attendants to fill vacancies that result when management fires flight attendants for a first positive drug or alcohol test. Each time a flight attendant is terminated, the costs of training that flight attendant are a wasted investment.

Because HIMS promotes peer identification and intervention, it increases the chance that a flight attendant will get treatment early and avoid mounting medical bills that often result from a sustained substance abuse. Also, absenteeism and on-the-job injuries, costly bottom lines for management, may also improve with an effective HIMS program. Countless union and management dollars could be saved as a result of HIMS. Airline expenses for grievances, system board and arbitration for substance abuse cases are substantial. With management and union endorsement, HIMS can reduce costly legal bills associated with substance abuse termination and/or discipline cases.

It's well past time to institute HIMS programs for flight attendants. It's time to give all flight attendants a chance at rehabilitation and recovery and a return to their careers. Too many of our colleagues have suffered in silence, afraid to speak up about their addiction struggles and management's draconian termination policies silence those who want to extend a helping hand. The warning signs often come too late to save careers. Expanding the HIMS program for flight attendants can usher in a cooperative environment that will work to ensure safety in the air and hope and recovery for those of our colleagues in need.

Development of a Method for Assessing Evacuation Capability of Aircraft under Actual Emergency Conditions

AFA-CWA urges Congress to have the National Academy of Sciences study the issues related to emergency evacuation certification of passenger transport aircraft and begin the process of developing a method for assessing evacuation capability of aircraft under real emergency conditions.

Design standards are used in the design phase of a project, and can be verified while the product, in this case, an airplane, "is still on the drawing board." *i.e.*, before the airplane is built. Performance standards evaluate the performance of the product, often under the influence of factors that cannot be effectively integrated or evaluated during the design. Typically, a performance standard involves a test of the product after it is built. In the case of a full-scale evacuation demonstration (a performance standard) of an airplane, the factors that must be evaluated are the performance of the passengers and crew.

The FAA made a change in policy that would allow new airplane designs or any increase in an existing design's capacity to be approved using analysis of data from past tests, rather than conducting a full-scale test of the model requiring certification. But there is currently no analytical method that is capable of predicting failure of the crew and passengers to meet the performance standard after the design

standard has been met. There have been such failures in the past. Since there are no analytical methods that can properly substitute for the full-scale demonstration, the FAA cannot enforce their policy.

The requirement for full-scale emergency evacuation demonstrations was introduced by FAA NPRM 63-42 (28 FR 11507, October 23, 1963). This notice justified this proposal by stating: "Recently, the Agency observed several simulated passenger emergency evacuation demonstrations which were conducted by various air carriers using different types of airplanes. The time required to accomplish each of these demonstrations varied from 131 to 213 seconds using 178 to 189 persons. In all instances, it was evident that a more realistic assignment of functions within the cabin would have resulted in lesser time to evacuate the airplane satisfactorily. From these demonstrations, it has been concluded that a physical demonstration of an air carrier's ability to execute its established emergency evacuation procedures within a specific time period is necessary in the interest of safety and to insure a more realistic assignment of functions which, in turn, will result in satisfactory accomplishment of emergency evacuation procedures."

Clearly, the original intent of the evacuation demonstration was to show the satisfactory accomplishment of emergency evacuation *procedures*. The final rule reinforced this intent (30 FR 3200, March 9, 1965).

The following year, FAA Notice 66-26 (31 FR 10275, July 29, 1966) proposed to establish comparable requirements for the airplane manufacturers. This notice stated that "... traditionally, it has been considered sufficient to provide the necessary components for emergency evacuation through detailed quantitative requirements prescribed in the airworthiness rules. However, experience has shown that compliance with these requirements does not ensure that the airplane can be evacuated, during an emergency, within an acceptable time interval. Differences in the relationships between elements of the emergency evacuation system introduce a considerable variation in evacuation time, and this variation is expected to be even more marked on larger transport aircraft under development." Thus it was acknowledged that relationships between the various elements of the evacuation system, not just the elements themselves, had a critical influence on evacuation time. In other words, the whole was considerably more complicated than the sum of its parts. Since the manufacturer would be demonstrating the basic capability of a new airplane type without regard to crewmember training, operating procedures and similar items (such demonstration of procedures was still required under Part 121, the operational requirements), this new demonstration was not expected to validate the evacuation procedures of the air carriers or operators. FAA Notice 66-26 also proposed that once a manufacturer had successfully conducted an evacuation demonstration for a particular airplane type, the passenger seating capacity could be increased by no more than 5 percent if the manufacturer could substantiate, by analysis, that all the passengers could be evacuated within the prescribed time limit. This appears to be the first proposal to suggest the use of "analysis" in lieu of full-scale evacuation testing. However, this analysis was intended to provide comparison with the full-scale evacuation actually conducted on the airplane. These proposals were adopted as a final rule (32 FR 13255, September 20, 1967).

The tests conducted by operators to show satisfactory accomplishment of emergency evacuation procedures and by manufacturers to show that the aircraft interior configuration and the relationship between the elements of its emergency evacuation system could be evacuated within a specified time period were allowed to be satisfied under a single test under Amendment 25-46 (43 FR 50578, October 30, 1978). Under this amendment, the FAA also stated that "A combination of analysis and tests may be used to show that the airplane is capable of being evacuated within 90 seconds under the conditions specified in 25.803(c) of this section if the Administrator finds that the combination of analysis and tests will provide data with respect to the emergency evacuation capability of the aircraft equivalent to that which would be obtained by actual demonstration." The FAA recognized the problems with this new provision and in its discussion of it concluded that: "Several commentators objected to the proposed amendment to 25.803(d) which would allow analysis in showing that the airplane is capable of being evacuated within 90 seconds. One commentator stated that analysis alone is an incomplete means of showing compliance and should not be allowed. Another commentator stated that extrapolations based on analytical testing have no practical relation to actual conditions which occur in accidents and evacuation demonstrations. The FAA agrees that the limitations on the use of analytical procedures should be made clear. The requirement that the Administrator find the analysis data acceptable was intended to *preclude approvals which might be based on insufficient test data, such as in the case of a completely new model or a model which has major changes or a considerably larger passenger capacity than a previously approved model*" (Italics ours.)

This intent was reinforced by the FAA Administrator in a 1986 Regulatory Interpretation and FAA Advisory Circular (AC) 25.803.1, Emergency Evacuation Demonstrations, issued November 13, 1989.

In 1985 testimony before the U.S. House of Representatives Subcommittee on Investigations and Oversight of this Committee (formerly named Public Works and Transportation Committee) and its Chairman, James Oberstar, the FAA Administrator suggested that a reassessment of regulations pertaining to emergency evacuation of transport airplanes was warranted. Consequently, an Emergency Evacuation Task Force, open to the public, for that purpose was established in September, 1985. The continued use of full-scale emergency evacuation demonstrations was one of the matters considered by that task force. One of the presentations, by Boeing, suggested that a rudimentary analytical procedure be used in lieu of full-scale demonstrations. Basically, the manufacturers favored analysis, while the representatives of people who flew on the airplanes, either as crewmembers or passengers, opposed analysis. The task force was unable to reach consensus on when to accept analysis in lieu of a demonstration. A similar process was undertaken by an advisory committee to the FAA in the 1990s with the same failure to reach consensus.

The procedures used by the flight attendants in a full-scale emergency evacuation certification demonstration are intended to become the baseline procedures for the aircraft type and model tested. This was the reason for the promulgation of the 1965 rule requiring operators to conduct full-scale emergency evacuation demonstrations. These procedures are found in the Flight Standardization Board Report for each type and model of aircraft. Yet some demonstrations conducted since 1996 have utilized a procedure that makes it easier for the manufacturer to pass the test, but it is not a procedure that is used by U.S. scheduled operators. The intent of the regulation requiring full-scale evacuation demonstrations is not being carried out by the FAA.

The analytical method does little more than calculate that, if the design standards are met, the aircraft could be evacuated within the requirements of the performance standard. Since the design requirements were intended to provide an airplane capable of being evacuated within the requirements of the performance standard, use of the analytical method is redundant.

Analysis is not a method that can predict failure of an emergency evacuation system, unlike a full-scale demonstration utilizing appropriate evacuation procedures.

The result of the FAA's policy and of the currently inadequate "state-of-the-art" analytical methods accepted under the policy, is that the first full-scale evacuation of a new airplane will be performed by the traveling public under emergency conditions rather than by paid test subjects under the controlled test conditions of a demonstration. There is no assurance that the evacuation would be successful. For this reason, the FAA should be required to rescind its policy of allowing the use of analysis in lieu of the full-scale demonstration until a scientifically valid method is developed.

The time is past due for development of a method for assessing the evacuation capability of aircraft under real emergency conditions. An independent blue ribbon panel needs to be established within the National Academy of Sciences (NAS) to examine these problems in depth and design a study to develop such a method, if not develop the method itself.

Foreign Control of U.S. Airlines

Recent years have seen an effort in the airline industry to move toward greater globalization. We remain concerned that these efforts will lead to greater foreign control of U.S. airlines, something that Congress has historically opposed on a strong bipartisan basis. We are pleased to see that the Committee has included language to address these concerns in the legislation passed last year by the House of Representatives. AFA believes that Congress should require that oral evidentiary hearings are held by DOT when an application for a certificate of public convenience and necessity is submitted by or on behalf of an applicant with any direct or indirect foreign carrier investment. Oral evidentiary hearings should also be required at DOT when a continuing fitness review of a carrier's certificate is held if that carrier has any direct or indirect foreign carrier investment in order to ensure that all issues are fully addressed, that Congressional intent in this area is carried out and the public interest is protected.

As you can tell from our testimony, AFA-CWA believes that there are a number of areas where improvements could be made by the FAA to improve aviation safety. We look forward to continuing our working relationship with this Committee and the Chairman to make progress on these important issues. Thank you again for the opportunity to testify today.

Senator LAUTENBERG. Thank you for your timely finish. Everybody is pressured with the last-minute things.

And Mr. McGlashen, I would just ask you one question. How glad are you and your colleagues in the Union that I and the Senate authored the no smoking law in airplanes?

Mr. MCGLASHEN. Yes, Senator. It was long overdue and your leadership, I think, has—I mean, you followed up with international rules, as well, and we can't be thankful enough.

Senator LAUTENBERG. Thank you. I did it for my own convenience. I can't stand being in an airplane with all that smoke.

[Laughter.]

Senator LAUTENBERG. But thank goodness we took a wise step there.

Mr. Forrey, we heard a lot of conversation about what it is that's causing all these delays and so forth and the one response that I got to the question I asked was that the Air Traffic Control System.

Now, there were a lot of retirements in the past, but very few in number compared to what we face. What will the impact be of the retirements of veterans, veteran controllers on safety of our aviation system, the training of the next generation of the traffic controllers? What actions does the FAA have to take now to keep our controllers, our control towers fully staffed and our skies safe well into the future?

Mr. FORREY. Well, that's a good question and probably takes a long time to answer and I'll try to do it as succinctly as I can.

Senator LAUTENBERG. Please do.

Mr. FORREY. First of all, we need to maintain the levels of controllers we have now. We can't afford to lose any more experienced controllers in the system.

There was just a study done by the FAA of the Newark TRACON which oversees the air space around Newark, Kennedy, LaGuardia, Teterboro, and they said if the continuation of the attrition continues on, and they have not certified a single new controller in the last two and a half years at that facility, that they will be unsustainable and they will not be able to handle traffic in that area.

So this is getting compounded even worse. We need to find a quick solution to a contract, to find a way to keep those experienced controllers from retiring not only in New York but throughout the system. We need to bring in those new trainees and we need to train them properly and not cut corners like the agency is doing now where they've basically given themselves waivers to shorten the training process and put people into circulation quicker than they probably should be, and we've seen the result of that in Buffalo, unfortunately.

This is the kind of thing that Congress and the Senate, through this FAA Reauthorization Bill, needs to jump on immediately to get this bill passed, so that it will shut down the agency's, you know, their continuation of moving down the Bush policies of consolidating and co-locating, splitting, certifying as quickly as they can to cover up the mess they've made of this Air Space system, and I think until they do that, until this bill gets passed and until we get a new administrator in place, that's not going to happen.

So anything that this Senate can do, this committee can do, obviously, and this Congress can do with the Administration to get this bill moving and passed so that we can stop this outtake of controllers and keep them in the system and train them right, the proper way, I think we're looking for a real dismal future. Forget about NextGen. You can—NowGen is going to be a dismal failure.

Senator LAUTENBERG. Are you aware of, for instance, the population in the Newark Tower, the controllers? We're not full strength now. We haven't had experienced controllers. We're off considerably from what we're supposed to have. I don't have the exact number, but it's at least 20 percent way down from where it should be.

Newark, you know, is one of the most delayed airports or if not the most delayed airport in the country and we don't have enough people there now to do what we have to.

Mr. FORREY. Agreed, sir, and, quite frankly, I get upset when I continue to hear people like Mr. May, who I respect greatly, state that the problems with the delays in New York are because of the Air Traffic Control System.

It's not completely the truth. The Air Traffic Control System in New York, actually the New York TRACON, is the most efficiently run TRACON in the country with those three airports because of the finals that they run at those places. They're the tightest in the country and the FAA's own data indicates that for the last year and a half—two years.

They continue to throw shots at the system which is there are problems in the system because of the staffing and it's only going to get worse, but they also have to look at themselves, as well.

You can't land 50 airplanes when the runways only handle 40 and you can't depart 60 airplanes when the runways will only allow 45 in an hour and that's what they continue to do and I don't care if it's sunny out or if there's, you know, a thunderstorm or a tornado flying through the area. That's just the physics. Unless they change the physics of the airport and procedures, then it's not going to change.

Senator LAUTENBERG. Captain Prater, do you agree with Mr. Forrey's assessment here?

Captain Prater: I'd be glad to tag on to Pat's statement because I've been flying out of Newark, based out of Newark since 1989. So I've had more than my share of delays on the ramp there.

Some of the problem is lack of concrete. We don't have enough runways in the Northeast. So it's not just air space. So we have to move the most people that we can.

Let's take a look at the airline industry itself and far be it for me to criticize the industry, but when you block up, intentionally block up an airport to prevent other people from coming in, when you intentionally put smaller airplanes into the system so that you can have more frequency and say that's what the marketplace wants, you're going to clog up the air space.

We could use larger airplanes and serve more people without quite as many delays, but that is up to each and every airline and the airlines certainly try to use their hub fortress mentality to protect from competition.

Senator LAUTENBERG. I won't get into that. Your viewpoint is respected, but we do have runway lengthening in place to be accom-

plished in Newark at a fairly early date, and all I have is about 40 more questions.

I think this is an uprising against the Chairman. We thank Senator Dorgan. We did get everybody's statement in and I told them it would be in the record, that they weren't just talking to an empty hall, and I thank them for the cooperation and know that the record will be kept open and we can submit questions that we have.

Senator DORGAN. Senator Lautenberg, thank you very much.

I did just vote on the vote that just started and so they'll be—most of them will be waiting for you to arrive in the Chamber.

Senator LAUTENBERG. OK.

Senator DORGAN. I told them you'll be on your way and we will have another vote in 10 minutes. So we're going to necessarily not be able to ask a lot of questions. I know some of you have traveled some distance to be here and the fact is I described the breadth of this issue and many of you represent a portion of that, it's a very important portion, as we discuss how to put a reauthorization bill together, how to do modernization, how to fix what we need to fix.

Senator LAUTENBERG. Mr. Chairman, may I raise one thing—

Senator DORGAN. Yes.

Senator LAUTENBERG.—that came up, a subject of interest, and that is cell phones in airplanes, and with that I leave you.

Senator DORGAN. All right. There's a trap door somewhere there, I'm sure.

[Laughter.]

Senator LAUTENBERG. Well, see you.

Senator DORGAN. I thank Senator Lautenberg for his courtesy of hearing your testimony while I had to go vote.

Let me just, as we conclude, because again we have another vote that will begin right after this one.

Captain Prater, you responded to what I had said earlier. We're going to do a safety hearing and we're going to begin digging into some of these issues, and again, I don't ever, in a hearing want to suggest to the American people that when they get on an airplane they are in any way unsafe because they're flying on bad equipment or they're flying with a crew that's ill-prepared or ill-trained or that sort of thing and that's the last thing that I want to do.

On the other hand, there are occasions when I wonder whether there are certain kinds of flights in which there is substantially less experience in the cockpit, some folks in the cockpit that earn very little money.

In the case that I read about today, someone in the cockpit that flew all night across the country in order to get there to make a flight that co-pilot then had to serve on. It just seems to me that there's something missing here, you know, that does in fact cause someone like me to say there's a safety issue, a training issue. There's something here that needs desperately to be resolved.

Would you respond to that?

Captain PRATER. Yes. I'd be glad to. While I certainly do not want to go into any of the current details because we are a party to the investigation, those pilots of Colgan Air flying as Continental Connection 3407 from Newark to Buffalo were my members for all

of 3 weeks. They had just voted to organize after several years of trying to organize.

We also lost another pilot in the back of the airplane who I had just appointed 2 days before to be on the Safety Committee of Colgan Airlines.

What we need to do is look at the best practices in our industry and some of the worst practices in our industry and we're willing to do that, to pull back the layers of that onion, to pull back the blankets. Let's take a look at how we can do it better.

We cannot afford to lose one airplane, one passenger, one pilot without looking at how we can do it better and we're certainly committed to do that investigation.

We do have serious concerns that you've alluded to. I've used the analogy that if you're a first officer, a co-pilot on an ATC airplane and you fly from here, from Washington, D.C., to New York, you'll be roughly on duty about an hour and you'll carry maybe 80 passengers in that turboprop airplane and if, at the end of that flight of about 45 minutes, if each passenger got off the airplane and handed the first officer a quarter, two bits in my dad's generation, you would double the salary of that co-pilot.

That's the conditions that we're living in today. The toll that the bankruptcies of this industry have taken, the fact that judges have thrown out contract after contract, they threw out more than just wages and retirements, they threw out working conditions and they threw out some of the safety net that we have to put back in.

The one thing we do need to get rid of in this industry is the statement, well, it's legal, the FAA says it's legal, therefore it must be safe.

Let me give you just two examples of legal. I'll let you determine safe.

As a 777 captain, I can take off from Newark at noon today, fly to Hong Kong and at 4:30 Newark time tomorrow morning I'll land you in Hong Kong, along with three other pilots, so there will be four of us on that 16+ hour flight. According to the FAA, I don't need any rest. I can turn around with those same three other pilots after an hour and fly another load of passengers back another 16 and a half or 17 hours, landing in Newark without any intervening break.

I can take in that ATC turboprop and go to work at noon and fly for 8 hours, maybe fly 6 legs, wind up in a place like Buffalo or Manchester, and take off 4 or 5 hours while the company says just stay at the airport, sleep in the airplane, find yourself a chair and then I can fly you back the next morning because I'm still within my 16-hour duty day.

Of course, it's legal by the current FARs. It's not safe and we need to change it.

Thank you.

Senator DORGAN. Captain Prater, just for the record, we should probably point out that I didn't forewarn you of that question because you seem so prepared for it.

[Laughter.]

Senator DORGAN. It is a very significant issue, as are all of the issues that you have raised, and as we try to put a piece of legislation together, we want to balance all of these interests in a way

that provides for safety and provides for modernization, you know, moves our system ahead. All of that's very important.

Again, let me say to you, I regret we have not had more time to question this panel, but you will have 2 weeks within which to submit additional material to us from the perspective of all of your constituencies and it will when you do that benefit us as we try to gather up all the information possible within which to write a bill.

I do want to say that we, as Senator Rockefeller, myself, Senator Hutchison and Senator DeMint and others, we want to try to put a bill together in a reasonably short period of time, move it out of the Commerce Committee the next couple of months and then get into a conference.

The House has already passed its—the Committee of the House has already passed its legislation. My hope is that we can get to conference. You know, we've been moving around a long time on this issue and we have not got it done and meanwhile we're not just wasting time, we're falling behind. All kinds of issues are laying there without being addressed or resolved and so I'm determined to try to see if we can fix that and change that.

So let me thank the second panel for being with us.

This hearing is adjourned.

[Whereupon, at 4:25 p.m., the hearing was adjourned.]

A P P E N D I X

PREPARED STATEMENT OF HON. BARBARA BOXER, U.S. SENATOR FROM CALIFORNIA

I want to thank Chairman Rockefeller, Senator Dorgan and the Committee for their commitment to crafting and implementing an FAA Reauthorization bill this Congress. This critical piece of legislation will modernize our air traffic control system and make air travel safer and more efficient.

In the wake of the recent air tragedy in Buffalo, the FAA is an agency that needs our attention and resources now more than ever.

I want to mention a few of my priorities for this legislation.

Clearly, the number one priority for the FAA must be safety. The initial National Transportation Safety Board (NTSB) hearings into the Buffalo crash raised serious concerns over FAA's oversight of the aviation industry. It is the FAA's responsibility to promote a culture that demands greater oversight and accountability and it must do more to ensure the safety and confidence of the flying public.

I am very concerned with the FAA's failure to implement critical NTSB recommendations designed to address some of the most pressing aviation safety deficiencies.

I recently joined Senator Snowe in a letter to the Department of Transportation urging the Agency to take immediate action to address unmet safety recommendations and issues. FAA must do more to enact preventative safety measures prior to a crash and not only in response to a tragedy. I will continue to work with Senator Snowe and my colleagues to press FAA on these safety issues to better protect the flying public.

Consumers also need to be reassured when they board an aircraft that they will not be held captive unnecessarily without access to basic necessities. While this may seem like a simple concept, for many Americans, being trapped on a tarmac in a severely delayed aircraft is a horrible reality.

That is why I introduced S. 213, the Airline Passenger Bill of Rights, to ensure passengers can no longer be trapped on airplanes for excessive periods of time without adequate food, water, working restrooms, properly ventilated cabins, and medical treatment while a plane is delayed.

My legislation requires air carriers and airports to develop emergency contingency plans to be approved by the Department of Transportation. It requires air carriers to offer passengers the option of safely deplaning every 3 hours that the plane continues to sit on the tarmac. The bill also provides a safety exemption if the pilot deems conditions for deplaning to be unsafe or if the flight will depart within the next 30 minutes.

Last year, the 2nd U.S. Circuit Court of Appeals struck down New York's Passenger Bill of Rights law because the court found that protections for airline passengers must be enacted at the Federal level.

We have relied on the airline industry before to regulate itself on this issue and it has failed. Efforts are underway in both Canada and the European Union to provide passengers with better protections and passengers in America cannot be left behind. We need to enact strong Passenger Bill of Rights legislation with a firm time-frame for deplanement to ensure that passengers will no longer be trapped on airplanes. I look forward to working with the Committee to include the strongest version of my bill possible in the FAA Reauthorization Bill.

Finally, the FAA must work to fix its deteriorated relationship with its workforce, primarily with its air traffic controllers. I am greatly concerned about morale among our air traffic controllers and by a recent DOT IG report highlighting the severe staffing shortages expected at California air traffic control facilities. I look forward to working with the Committee to address these staffing shortages in the FAA Reauthorization Bill.

The FAA Reauthorization Bill is a critical piece of legislation which would make air travel safer, more efficient, and provide greater protection for consumer rights. As a member of this Committee, I am dedicated to working together with my colleagues to pass and implement this legislation quickly.

PREPARED STATEMENT OF CRAIG FULLER, PRESIDENT,
AIRCRAFT OWNERS AND PILOTS ASSOCIATION

Statement Highlights

1. The Nation's Aviation system needs modernization on an expedited basis and there are actions that should be taken immediately to foster implementation.

2. The Nation's Air Traffic Controllers are crucial to aviation safety and modernization efforts, and need a fair agreement in place as soon as possible.

3. A four-year FAA Reauthorization is needed to insure efficient and effective investment in air traffic control modernization and the fulfillment of FAA's mission.

4. Continued support of the FAA through general fund contributions is fully consistent with national policy and is critical to achieving air transportation system priorities. It is also in line with the commitment to fund other modes of transportation with general fund monies.

5. Funding approaches, such as those suggested for FY 2011 in the Administration's budget request involving user fees leading to commercialization of air traffic control create new bureaucracies, disincentives to utilize a system dedicated to safety for all who fly, prove devastating to general aviation where tried and have historically slowed down the process of advancing a critically important aviation agenda in Congress.

6. The Senate's leadership in setting a 4-year agenda for the Nation's air transportation system has never been more critical.

The Aircraft Owners and Pilots Association (AOPA) is a not-for-profit individual membership organization representing more than 414,000 members, which is nearly three-quarters of the Nation's pilots. AOPA's mission is to effectively represent the interests of its members as aircraft owners and pilots concerning the economy, safety, utility, and popularity of flight in general aviation (GA) aircraft.

As pilots flying in the United States, we experience firsthand the safest and most efficient air transportation system in the world. This aviation network of 5,200 public use airports, complemented by the more than 13,000 privately-owned landing facilities is a unique national resource. In a poll conducted on election night last November, more than 60 percent of American voters said they understood that general aviation (all flying other than military or commercial airlines) is a vital part of America's transportation system. Each year, 170 million passengers fly using personal aviation, the equivalent of one of the Nation's major airlines, contributing more than \$150 billion to U.S. economic output, directly or indirectly, and employing nearly 1.3 million people whose collective annual earnings exceed \$53 billion.

Current Economic Climate

The general aviation community, like many other parts of the aviation industry has been adversely impacted by the economic downturn. More than 13,000 jobs have been lost nationally. Sales of aviation gasoline, the life blood of light aircraft flying, saw a 19 percent decline from February 2008 to February 2009. Flight training has slowed, with a 24 percent reduction in student pilot certificates issued from March 2008 to March 2009, and there is a six-percent reduction in the number of private pilot certificates issued in 2008, the lowest since 1984. Another indicator of the downturn is the number of airplanes flying through the system. According to the FAA's traffic statistics, general aviation flew 13 percent fewer flights at airports with operating control towers.

Just last week, the General Aviation Manufacturers Association announced in the first 3 months of 2009, deliveries of general aviation airplanes dropped 41.4 percent from the same period last year. The piston aircraft segment was down 55.1 percent and business jet shipments fell 35.7 percent. The turboprop segment was the only segment that increased, up 3.4 percent during the same period in 2008.

Long Term FAA Funding Needed

A four-year FAA authorization bill and the certainty it provides is vital for Federal investments in safety, modernizing the air traffic control system, FAA operations, airport improvements and aviation research efforts.

Historically, Congress has used a system of passenger transportation and aviation fuel taxes in combination with general fund tax revenues to support the FAA and the aviation system. The existing financing mechanism has served the Nation well providing a stable and reliable aviation system during good and difficult times over the last 50 years. Aviation fuel taxes collected at the pump and ticket taxes collected at the counter, combined with a healthy contribution from the general tax fund, remain the best way to pay for the Nation's aviation system and avoid an unfair burden on general aviation and costly new bureaucracy.

Just prior to establishing the FAA's Airport and Airway Trust Fund in 1969, Congress recognized that a general fund contribution is necessary. Nearly 40 years ago, they observed that, "there are others who are indirectly benefited by air transportation because of the non-aviation employment which air transportation generates."

The use of General Fund investment in transportation is consistent in other areas of the Federal budget. For example, the waterway system receives 75 percent of its funds from general taxpayers. Amtrak receives more than 40 percent from the General Fund, and even highways received \$8 billion from the General Fund this past year.

The current sharp economic downturn is affecting all sectors of the economy, and year-to-date data show that the revenue stream to the Aviation Trust Fund is no exception. Although Trust Fund tax receipts for FY2008 came in about as projected at roughly \$12 billion, Trust Fund receipts for FY2009 are forecast to drop to \$11.3 billion. The revenue stream is likely to begin to improve in 2010 to \$11.7 billion. Forecasts differ on how long it will take for a complete rebound, so we are not in a position to make firm projections. Of course, much will depend on the overall economy.

What are the implications of this? The situation clearly bears watching, but the Committee should anticipate a need for a larger General Fund contribution to FAA's budget, probably in the neighborhood of 25–30 percent in 2009—still well within historical norms. The average General Fund contribution to the Aviation Trust Fund since 1982 has been 32 percent and over the last 8 years has averaged 22 percent. In 2008, that contribution was about 20 percent and in 2009, it is 25 percent. The President's 2010 budget proposes a General Fund contribution of approximately 25 percent. We encourage the Committee to include a General Fund contribution of no less than 25 percent annually.

Congress has wisely recognized that a Federal aviation network is only possible by using tax revenues from various parts of the system for financial support. As an illustration of how this is similar to other modes, if Federal highways had been built in only those states that have contributed since 1956, the Interstate and U.S. highway system would exist in only 15 states! Drivers in Wisconsin, New Jersey, Tennessee, California, Missouri, Florida, Ohio, Georgia, Michigan, South Carolina, North Carolina, Oklahoma, Indiana and Texas have "subsidized" Federal-aid highway construction in 35 other states and the District of Columbia.

AOPA strongly supports the financing approach of using the time-tested system of passenger transportation and aviation fuel taxes in combination with general fund tax revenues to support the FAA and the aviation system.

During the last Congress, AOPA agreed to a 25 percent tax increase on aviation gasoline and a 65 percent tax increase on non-commercial jet fuel. Even though economic times are worse now than 1 year ago, and the United States is going through the worst economic crisis since the Great Depression, AOPA members continue to support the agreed-to increases in the general aviation fuel taxes which would achieve additional revenue to the Aviation Trust Fund for air traffic control modernization in lieu of user fees. We encourage the Committee to expeditiously approve legislation following that framework.

We are disappointed that the Administration's FY2010 Budget Revenue Proposal assumes that the air traffic control system will be funded with direct charges levied on users of the system beginning October 1, 2011 and that aviation excise taxes will be commensurately reduced.

Looking Ahead on Air Traffic Control Modernization

Aviation in America is growing in size and diversity in both the civilian and military sectors. New technologies have resulted in engine and airframe enhancements that have sparked the introduction of several new general aviation airplane designs. Meanwhile, the Department of Defense has increased their use of unmanned aircraft, resulting in the need for the FAA to accommodate their operations without affecting current airspace users.

In late January, the FAA released their ten-year (mid-term) plan for NextGen, called the NextGen Implementation Plan (NGIP), outlining key projects and activities that the FAA wants to complete by 2018. It is encouraging that the FAA plan includes the proliferation of much needed precision approaches at thousands of general aviation airports, and the FAA intends to improve services at small airports, upgrading the level of ATC services to nearly the same quality as those found only at large hub airports. However, the ten-year plan also recommends policy changes that raise concerns about general aviation's access to airports and airspace.

AOPA supports and is participating in the recent FAA initiative to create an industry Task Force to review Next Generation Implementation Plan, and identify areas of agreement on priorities. We urge this Subcommittee to track the progress

made by the task force and we ask that you consider monitoring the FAA response, to ensure that the recommendations are accepted and addressed. Because the Task Force is asked to look at the near-term and mid-term timeframe, quick action will be needed by the FAA, industry and Congress to remove any of the identified roadblocks and address the critical policy issues.

ATC Modernization

AOPA believes that the Congress should require the FAA to develop plans for the next 5 years that will help implement existing modernization efforts and lay the groundwork for others under development. It is also necessary for this Subcommittee to maintain a high degree of oversight to ensure that the plans continue to proceed.

AOPA has identified three modernization efforts that can be implemented in the next 5–8 years.

1. *Commit to 500 Precision Wide Area Augmentation System (WAAS) approaches annually*—An exciting example of a new technology that efficiently improves safety and enhances access to airports across the country is WAAS. Because of WAAS, more than 340 airports are accessible with precision approaches for the first time, and 785 runways now support all-weather access. In fact, there are now more precision WAAS LPV approaches published than the much more expensive Instrument Landing System (ILS). However, more WAAS approaches are needed, and if the FAA develops 500 WAAS approaches per year, many more communities will have improved access to the aviation system.

2. *Modify procedures and policies to improve GPS use for navigation*—The FAA has greatly enhanced navigation by enabling pilots to use the Global Positioning System (GPS) and WAAS. However, pilots flying throughout the country continue to be assigned routes and clearances that follow the zigzag ground path of the 1960s and 1970s ground-based navigation systems such as Very High Frequency Omni Range (VOR). This is inefficient, wasting time and increasing fuel consumption.

The FAA now needs to finish transforming today's low-altitude en-route airspace system so that GPS point-to-point navigation can be achieved throughout the entire country. This includes the publication of low-altitude airways through congested airspace and a much greater use of direct-to navigation. Navigation along the east coast of the United States remains largely as it was two decades ago, and the voluntary equipage by general aviation could be more fully utilized with a comprehensive overhaul of routes flown by our membership. In addition, pilots should not be required to rely on VORs or other ground-based navigation for departure from general aviation airports. The FAA should design new, easy-to-use departures that can be flown using a GPS and that offer multiple departure directions. Finalizing the transition of our airspace so that it fully supports GPS navigation will deliver the added benefits that motivates pilots to continue their voluntarily transition to satellite navigation.

3. *Identify and implement incentives that encourage ADS-B adoption and equipage*—For the longer term, Automatic Dependant Surveillance-Broadcast (ADS-B) will require extensive investments in ground and air borne equipment as the FAA shifts from a ground-based radar system, to one relying on GPS and ADS-B transmitters installed in aircraft. Unfortunately, ADS-B does not share the same good news equipage story associated with GPS navigation. Instead, our members tell us that ADS-B incentives are difficult to identify and the investment costs are excessive.

The FAA must define an acceptable approach to move ahead, one that addresses the benefits, costs and the schedule for the future. As you know from our previous testimony during the economic recovery efforts, one near-term way to facilitate this would be for Congress to approve a pilot program that provides for reimbursement or tax incentives to aircraft owners for ADS-B equipment installations on aircraft involved in evaluations and demonstrations. The FAA can also take steps to increase general aviation pilot access to the services and information enabled with ADS-B. The current FAA plan is to provide ADS-B services in the same geographical footprint as today's radar coverage. As you are likely aware, thousands of general aviation airports are outside radar coverage, and may never benefit from ADS-B unless this strategy is changed.

Air Traffic Control Modernization Has Limits; Airport Improvements and Adequate Airport Funding are also Critical to Aviation Growth

Context is also important when discussing NextGen. Without a doubt, incorporating new technology will improve the air traffic control system, but it takes time and there is a limit to the amount of improvement and capacity enhancements that modernization brings. In fact, as I travel to general aviation airports across the Na-

tion, I am constantly reminded that airports are as critical to the aviation transportation system as on- and off-ramps are to our Federal highway system. Federal airport funding should be no less than \$3.8 billion.

Repeatedly, I find communities enthusiastic about airport expansions that produce immediate jobs as well as renewed opportunities in the community for economic growth. My staff reviews news headlines across the country and the economic recovery funding is making a difference at general aviation airports, and is proving that Congress understands the value of local airports. It is important to note that all of the new technology and capabilities will be underutilized unless pilots have a place to take off and land. America's airports foster air transportation and a discussion about modernization cannot be complete without an integrated plan for airport improvements. General aviation facilities are an important part of the U.S. infrastructure and should not be left out of any infrastructure initiative.

Registration Fees Impact General Aviation

The House FAA Reauthorization Bill, H.R. 915, includes significant increases in various FAA fees for aircraft and airman registration. Many of these fees have not been increased since 1963. Based on an analysis conducted by AOPA in 2007, many of these adjusted fees would be similar, or in the range of those imposed on automobiles and boats. However, many members objected to establishing a new \$42 fee for issuing an airman's medical certificate. Unique to aviation, the FAA requires each Aviation Medical Examiner to not only evaluate an airman's medical condition, but also to process and transmit the completed medical application and approval package to the FAA, and the medical examiner currently recovers the costs associated with this service. Therefore, AOPA questions the extent to which the FAA incurs any additional expenses to simply file airman medicals, and therefore, we do not believe an FAA medical issuance fee is warranted.

Aviation and the Environment

It is important that the Department of Transportation and the FAA be involved in environmental issues that affect aviation. AOPA urges the Committee to ensure that the FAA is prepared to address proposed policies, regulations and standards that target aviation gasoline, greenhouse gas emissions, and aircraft noise. It is also important that the FAA continue supporting efforts by the aviation industry to identify an unleaded replacement for aviation gasoline.

FAA Administrator Will Play Vital Role in Aviation's Future

This Committee is well aware how important strong leadership is for the FAA. The FAA must respond to the challenges being faced by the aviation industry and ensure that the air transportation system continues its role in the economic revitalization of the country. AOPA believes that the next Administrator must make unifying the aviation community a priority.

Conclusion

On behalf of the members of AOPA, thank you for your leadership in examining the need for action on the FAA Authorization legislation. We urge you to move expeditiously in approving a four-year bill that provides support for Federal investments in safety, modernizing the air traffic control system, FAA operations, airport improvements and aviation research efforts. We endorse the financing mechanism of using the time-tested system of passenger transportation and the agreed to increases in general aviation fuel taxes in combination with General Fund tax revenues to support the FAA and the aviation system.

PREPARED STATEMENT OF THE AIRPORT MINORITY ADVISORY COUNCIL (AMAC)

Mr, Chairman, Mr. Ranking Member, and Members of the Subcommittee on Aviation Operations, Safety, and Security, my name is Don O'Bannon and I am proud to serve as the Chair of the Airport Minority Advisory Council (AMAC). AMAC is the only national, non-profit organization dedicated to increasing participation of minority- and women-owned businesses in airport contracting and concessions and to increasing minority and women employees in the airport industry. Combined with its affiliate, the AMAC Educational Scholarship Program, AMAC represents thousands of individuals involved in the airport industry, ranging from minority and women business owners to corporations.

On behalf of AMAC, I am submitting this statement for the record regarding the Department of Transportation's Airport Disadvantaged Business Enterprise (DBE) program. As you are aware, the airport DBE program is administered by the Federal Aviation Administration (FAA) and the Department of Transportation (DOT).

As further discussed in this statement, the airport DBE program is critically important in ensuring that there is a “level playing field” for small minority and women-owned businesses with respect to airport contracting. I sincerely thank you for this opportunity and for your consideration of AMAC’s views.

I. Introduction

AMAC is devoted to the full inclusion and participation of minority and women in airport management and the participation of DBE firms in contracting in airports and airport-related industries. In particular, AMAC is a strong advocate for Federal policies like the airport DBE program that redress past and ongoing discrimination in the airport industry. In addition, AMAC also seeks to raise awareness regarding the significant economic benefits that DBE firms contribute to airports, to the traveling public, and to the communities in which they do business. For example, I work at the Dallas/Fort Worth International Airport (DFW). DFW is committed to ensuring that local DBE firms have an equal opportunity to compete for contracts awarded by the DFW Airport Authority. Some of the prime concessionaires for DFW’s new D terminal began as minority joint venture partners under the DBE program; these firms have subsequently been awarded several concession packages as prime contractors. Given the opportunity to compete because of the airport DBE program, these businesses flourished as a result of their owners’ hard work and business prowess.

The importance of DBE efforts like the DFW program cannot be overstated. As this Subcommittee is aware, racial and gender discrimination against minority and women business owners continues to be an ongoing and a critical problem throughout the United States. I have routinely seen minority and women business owners experience discrimination in all aspects of airport contracting and concessions—in areas such as contract formation, bonding, insurance, credit, the purchase of supplies, and interactions with their business peers.

As a consequence, AMAC believes that there is a continuing need for a robust airport DBE program and to this end, my statement respectfully highlights certain governmental policies that AMAC believes should be adopted as part of the FAA Reauthorization.

II. The Airport Disadvantaged Business Enterprise Program

As this Subcommittee is aware, the airport DBE program is codified as part of the Airport Improvement Program (AIP). Specifically the airport DBE program consists of two sub-components—one pertaining to airport contracting (*e.g.*, construction or professional services contracts), codified in Part 26 of Title 49 of the Code of Federal Regulations (CFR) and referred to as the DBE program, and one pertaining to airport concessions, codified in Part 23 of Title 49 of the CFR and referred to as the Airport Concessions DBE program (ACDBE). Again, both components are designed to remedy past and ongoing discrimination based on the race or gender of the business owner.

As part of the airport DBE program, Congress has established a 10 percent aspirational participation goal for DBEs with respect to federally-assisted airport contracting and for concessions (*i.e.*, the goal is not a quota or a set aside). All primary airports, however, must develop and execute an FAA-approved DBE program in good faith and with overall contracting and concession participation goals based on the levels of participation that would be expected in the absence of discrimination. In order to be certified as a DBE and participate in the program, a firm and its minority and women owners must meet requirements related to: (1) ownership and control; (2) personal net worth; and (3) firm size.

Except for certain Department of Transportation (DOT) rules that uniquely apply to airport concessions, the airport DBE program regulations are the same as those that govern other Federal surface transportation programs. DOT and FAA jointly implement the programs.¹ Importantly, the program and its implementing regulations have been found by the courts to meet constitutional requirements for a “race-conscious” program. The facial constitutionality of the program has been upheld by every Federal circuit court that has considered it.

III. Economic Benefits of Airport DBE Program

The minority- and women-owned firms that participate in the airport DBE programs provide substantial economic benefits to the airports and to the surrounding communities in which they operate. These firms provide a variety of important prod-

¹DOT has primary responsibility for developing rules and guidelines for the national DBE program and for considering certification appeals. The FAA Office of Civil Rights has primary oversight responsibility for the program and for airport compliance.

ucts and services to the travelers and businesses that rely on airports. Moreover, the airport DBE programs are a significant source of entrepreneurship, employment, and economic growth.

The University of North Texas recently conducted a study of the economic impact of DBE concessions businesses at the airport where I work, the Dallas/Ft. Worth International Airport.² Between September 2006 and August 2008, the study found firms that participated in the Airport's Disadvantaged, Minority-, and Women-Owned Business Enterprise (DMWBE) Program produced more than \$350 million in gross concession revenue and \$280 million in contracting revenue. These businesses created over 14,000 job years of employment, increased labor income by more than \$450 million, and generated an astonishing \$1.2 billion in economic activity.³ The significant and positive economic contributions of airport DBE firms should be celebrated and documented.

IV. Discrimination in the Aviation Industry is Still a Problem for DBE Firms

Although the airport DBE contracting and concessions programs have begun to make headway, discrimination against minority- and women-owned businesses continues to be pervasive in the airport industry. The evidence is abundant, compelling, and demonstrative of the vital role these programs play in the effort to address current and past discrimination against minority- and women-owned firms.

With our testimony today, AMAC is submitting twenty-one disparity-type studies.⁴ These studies, through detailed statistical and anecdotal evidence, demonstrate insidious discrimination against women and minorities in the airport industry. Discrimination is also present in every sector in which airports and other transportation agencies conduct business, such as professional services and heavy construction, and in every stage of the concessions and contracting business lifecycle. The twenty studies submitted represent a cross-section of our country—every region of the Nation, including rural, urban, and suburban areas. Regardless of location, the studies confirm that discrimination continues to be directed at women and all minority groups, including but not limited to African-Americans, Hispanic Americans, Asian Americans, Subcontinent Asian Americans, and Native Americans. Further, the discrimination takes a variety of forms.

Many of the studies present extensive anecdotal evidence that provides direct insight into the sources and forms of discrimination. More importantly, this evidence humanizes the impact of discrimination on DBE owners—these are the actual sto-

²Terry L. Clower, Bernard L. Weinstein, Michael Seman, and Mehmet Adalar, Center for Economic Development and Research—University of North Texas, DFW International Airport's Disadvantaged, Minority- and Women-owned Business Enterprise Program: Detailed Findings and Updates (Feb. 2009).

³*Id.*

⁴*Race, Sex and Business Enterprise: Evidence from Memphis, Tennessee*, Prepared for the Memphis-Shelby County Airport Authority, NERA Economic Consulting, December 18, 2008; *Final Report: Alaska Disadvantaged Business Enterprise Study—Availability and Disparity*, D. Wilson Consulting Group, LLC, June 6, 2008; *Race, Sex, and Business Enterprise: Evidence from the City of Austin: Final Report Prepared for the City of Austin, Texas*, NERA Economic Consulting, May 15, 2008; *Final Report for Development and Revision of Small, Minority and Women Business Enterprise Program*, Nashville International Airport (BNA), Griffin and Strong, PC, September 19, 2007; *Disadvantaged Business Enterprise Availability Study*, prepared for the Maryland Department of Transportation, NERA, separate studies for: Maryland Aviation Administration, Maryland Transit Administration, and State Highway Administration, November 2, 2006; *Race, Sex and Business Enterprise, Evidence from the State of Washington*, NERA Economic Consulting, October 20, 2005; *Anecdotal Evidence of Race and Sex Disparities in the Washington State Department of Transportation's Contracting Market Place*, Colette Holt & Associates, July 2006; *Race, Sex and Business Enterprise: Evidence from Denver, CO*, NERA Economic Consulting, May 5, 2006; *Race, Sex and Business Enterprise: Evidence from the State of Maryland*, NERA Economic Consulting, March 8, 2006; *Race, Sex and Business Enterprise: Evidence from the State of Minnesota*, NERA Economic Consulting and Colette Holt and Associates, September 27, 2005; *State of New Jersey Disparity Study of Procurement of Professional Services, Other Services, Goods and Commodities*, MGT, June 13, 2005; *The City of Phoenix, Minority-Women-Owned and Small Business Enterprise Program Update Study: Final Report*, MOT of America, April 21, 2005; *Disadvantaged Business Enterprise Availability Study*, prepared for the Missouri Department of Transportation, NERA, November 26, 2004; *Disadvantaged Business Enterprise Availability Study*, prepared for the Illinois Department of Transportation, NERA, August 16, 2004; *North Carolina Department of Transportation Second Generation Disparity Study: Final Report*, MGT of America, Inc., March 30, 2004; *Disparity Study for the Commonwealth of Kentucky*, Griffin and Strong, P.C., March 2003; *Broward County Small Disadvantaged Business Enterprise (SDBE) Disparity Study*, MGT of America, Inc., April 3, 2001; *The Utilization of Minority Business Enterprises by The State of Maryland*, NERA Economic Consulting, January 8, 2001; and *Dallas/Fort Worth International Airport Board Disparity Study Final Report*, MGT of America, October 17, 2000.

ries of individuals and families struggling to build their businesses and contribute to their communities. Here are just a few examples:

- A minority contractor reported that a project engineer told him that “being a Mexican, [he] did shitty work,” and refused to pay him the full amount of the contract.⁵
- An Alaska native contractor has been consistently treated unfairly because of his race. On one occasion, the prime contractor’s excavator hit a power line, falling on and damaging his new truck. Even though he had witnessed the event, the prime contractor denied responsibility. He said “they all just gang up on you and lie for each other.”⁶
- One female business owner was told she was not selected because she is a woman. She demurred in filing a complaint because of fears of retaliation. Other firms reported receiving no relief, being punished, or being “blackballed” if they spoke up.⁷
- An African-American business owner has experienced direct discrimination in obtaining loans. She applied for a loan with excellent credit and with a bank she had a relationship with for 9 years. The bank continually delayed the approval process. She felt as though the delay was due to her race. She observed that when “somebody who does not want to do business with you and will find a way not to do business with you.”⁸
- A Hispanic-American female said that a general contractor discriminated against her and tried to intimidate and degrade her due to her gender and race. She noted “He wanted to see me on the field. He didn’t like the fact that I . . . had people working under me.”⁹
- An African-American male stated that he is often confronted with discriminatory attitudes, with companies commonly saying that they do not want to do business with him. He recalls that on one occasion he was told to “get [his] Black ass out.”¹⁰

Each of the disparity studies also provides significant quantitative evidence of discrimination against minority- and women-owned businesses dealing in industries that are integral to airport contracting. I would like to cite just a few of the myriad of examples in order to demonstrate the gravity of this issue:

- Several studies have established widespread wage differentials between non-minority men and African Americans, Hispanic Americans, Asian Americans, Native Americans, and women, even when controlling for relevant factors. One study describes the wage disparity as “large, negative, and statistically significant.” The study concludes that the wage disparities are indicative of the presence of discrimination in the labor market.¹¹ This wage differential makes it especially difficult for minorities and women to accumulate the capital necessary to start their own businesses.
- In one study, over 40 percent of African American firms and over 23 percent of Hispanic American firms reported they had experienced some form of racial discrimination.¹²
- Several studies indicate that there are statistically significant and large business formation disparities for minorities and women. For example, one study found that business formation for Hispanic Americans is 32 percent to 43 percent lower than business formation for non-minority males.¹³
- One disparity study found that an astonishing 78.81 percent of construction firms are owned by non-minority males. The second highest group, non-minority females, only own 7.52 percent of construction firms. Asian-American firms com-

⁵ *Evidence from Denver, CO*, at pp. 206.

⁶ *Final Report: Alaska Disadvantaged Business Enterprise Study—Availability and Disparity*, at 8–27 to 8–28.

⁷ *Evidence from Denver, CO*, at pp. 206.

⁸ *Race, Sex, and the Business Enterprise: Evidence from the City of Memphis: Final Report*, at 261.

⁹ *City of Phoenix, Minority-, Women-Owned and Small Business Enterprise Program Update Study: Report*, at 210–11.

¹⁰ *Broward County Small Disadvantaged Business Enterprise (SDBE) Disparity Study*, at 6–82.

¹¹ *Race, Sex and Business Enterprise: Evidence from the State of Maryland*, at 7.

¹² *Broward County Small Disadvantaged Business Enterprise (SDBE) Disparity Study*, at 6–32.

¹³ *Race, Sex and Business Enterprise: Evidence from the State of Minnesota*, at 35–37.

prise the smallest group, with only 0.44 percent. Moreover, the study concluded that firms owned by non-minority males were over-utilized.¹⁴

- Research has indicated that minority and female entrepreneurs earn substantially and significantly less from their efforts than similarly situated non-minority male entrepreneurs. One study concludes that “these disparities are a symptom of discrimination in commercial markets that directly and adversely affects DBEs.” The study further notes that “if minorities and women cannot earn remuneration from their entrepreneurial efforts comparable to that of White males, growth rates will slow, business failure rates will increase, and as demonstrated in the next section, business formation rates will decrease. Combined, these phenomena result in lower DBE availability levels than observed in a race- and sex-neutral marketplace.”¹⁵
- Several studies established widespread discrimination in the credit market. One study found that 60.5 percent of African-Americans report being “always” denied loans, whereas only 7.3 percent of non-minority males report the same. Once loans are approved, minority- and women-business owners pay higher interest rates as well. According to the study, Hispanic Americans pay 20.9 percent interest on approved loans compared to 6.7 percent for non-minority males.¹⁶

These studies provide a strong anecdotal and statistical record of evidence of pervasive discrimination against minorities and women. They also demonstrate that there is a strong and continuing need for the airport contracting and concessions DBE programs. We urge Congress to continue to investigate and document the continuing impact of discrimination against businesses owned by minorities and women in airport-related industries.

V. Improvements to the Airport DBE Programs

I would like to take this opportunity to bring to your attention a few issues related to the DBE program. First, it is important to note that, AIP is a critical source of funding for airport capital projects, particularly for smaller airports whose access to private capital markets is limited. We support reauthorization of the AIP program at a funding level that provides for necessary airport infrastructure. In addition, the series of short-term extensions over the last year and a half has limited the ability of airports to plan and execute much needed infrastructure programs. As such, AMAC would like to urge the Senate to act quickly to enact an FAA Reauthorization bill.

Second, as noted previously, there is one set of Federal regulations that govern DBE programs across the country. However, certifying officials often vary in their interpretation and application of the rules. This is a great burden on DBE firms, many of which are small, family-run businesses that expend sizable resources during the DBE certification process. Thus, AMAC supports efforts to establish a mandatory certification training program and require DBE certifiers to complete the training. A provision addressing these concerns is included in Section 135 of the House FAA Reauthorization Bill (H.R. 915, *as amended*), which has been reported favorably out of the T&I Committee. AMAC encourages the Senate to consider including a provision to address these issues as part of its consideration of FAA Reauthorization.

Third, a minority or woman owner of a firm must have a personal net worth (PNW) that does not exceed \$750,000 in order to meet DBE certification requirements. The \$750,000 PNW standard in the airport DBE program regulations was originally established by the Small Business Administration (SBA) over two decades ago, and more recently borrowed by DOT and implemented for the DBE program. It was first applied to airport contracting (Part 26) in 1999 and later applied to airport concessions (Part 23) in 2005. The SBA has not adjusted the standard for inflation since it first adopted it by regulation in 1989 and, to date, neither has DOT. Moreover, the PNW formula does not take into account the realities of operating an airport contracting or concession business. Businesses incur increased operating costs associated with working in an airport, such as expenses related to higher general contracting costs for remodeling and for compliance with airport security protocols.

¹⁴ *Final Report for Development and Revision of Small, Minority and Women Business Enterprise Program, Nashville International Airport (BNA)*, at 4–10, 46.

¹⁵ *Evidence from the State of Washington*, at 30.

¹⁶ *Final Report for Development and Revision of Small, Minority and Women Business Enterprise Program, Nashville International Airport (BNA)*, at 9–10.

AMAC strongly supports adjusting the PNW for inflation as a matter of economic common sense and fairness. In particular, AMAC supports Sec. 137 of the House FAA Reauthorization Bill (H.R. 915), which would direct DOT to issue final regulations to initially adjust the PNW for the inflation that has occurred since 1989 and then to adjust the PNW for inflation each year thereafter. We encourage the inclusion of such a provision as part of the Senate FAA Reauthorization Bill. In addition, we urge you to exclude retirement assets from an applicant's PNW assessment. AMAC believes it is unfair and unwise to have a program rule that, in effect, assumes that retirement savings are available to business owners—or, even worse, indirectly encourages such savings to be liquidated. We recommend that assets in a qualified retirement account be excluded when calculating personal net worth.

A fourth recommendation involves rules relating to airport security projects financed by TSA or projects funded with revenues from passenger facility charges (PFCs). When airports expend AIP funds, they are required to have a DBE program to address the problem of discrimination in airport related business. There is no requirement, however, for a DBE program for projects funded with Passenger Facility Charges (PFC) or through the Transportation Security Administration (TSA). Despite this, the need for a level playing field for minority and women-owned businesses is no less acute in projects funded with PFCs or through TSA grants than it is in projects and contracts funded with AIP funds. Discrimination poses barriers to minority and women-owned firms regardless of the source of funds.

AMAC seeks to ensure that discrimination against minority and women-owned businesses is vigorously addressed regardless of the funding source or its classification. Experience demonstrates that without Federal DBE aspirational goal requirements programs, minority and women business owners will be left out and left behind. AMAC urges Congress to consider policy mechanisms to address this problem. One alternative would be to simply apply the existing (and court-tested) DBE program to PFC-funded projects and TSA funds. Another alternative for the PFC context might be to allow airports to choose one of two options: either (1) apply their existing airport DBE program or (2) apply a meaningful and enforceable local minority and women business program that contains provisions that are similar to the airport DBE program but that is not federally defined. AMAC's chief concern is the fight against discrimination and to ensure a level playing field for minority and women-owned businesses—and that goal requires both diligence and a robust minority and women business programs regardless of whether the programs are Federal or local in nature.

VII. Conclusion

Mr. Chairman, thank you for the opportunity to submit this statement to this esteemed panel and for your consideration of our views. AMAC greatly appreciates the Senate Aviation Operations, Safety, and Security Subcommittee's leadership against discrimination and in support of disadvantaged business enterprises operating in the airport industry. We look forward to working with the Subcommittee on these important issues.

May 12, 2009

Hon. JOHN D. ROCKEFELLER IV,
Chairman,
Senate Committee on Commerce, Science, and Transportation,
Washington, DC.

Hon. KAY BAILEY HUTCHISON,
Ranking Member,
Senate Committee on Commerce, Science, and Transportation,
Washington, DC.

Dear Chairman Rockefeller and Ranking Member Hutchison:

We are writing to urge you to oppose any and all attempts to include language in the Senate version of the Federal Aviation Administration (FAA) Reauthorization bill that would either legislate changes in the current aircraft rescue and fire fighting (ARFF) standards or legislate that an unfair rulemaking process be undertaken to make changes in the standards. If enacted into law, these proposals could unnecessarily increase costs for airports and airlines as well as jeopardize commercial air service to small communities.

As you may know, H.R. 915, the FAA Reauthorization Act that the House Transportation and Infrastructure Committee approved earlier this year, contains a provision that could force airports of all sizes to comply with controversial National Fire Protection Association (NFPA) standards. Although each of us supports various sec-

tions in the House bill, we are unified in our opposition to Sec. 311, in part, because it could impose huge costs onto airports and the airlines without any benefit to aviation safety.

To meet NFPA standards, airports of all sizes would be required to dramatically increase the number of fire fighters and add additional facilities without any evidence that these changes would improve the safety of airports. Increased capital and annual operating costs resulting from the NFPA standards would force airports to divert their already limited funding resources from other necessary safety and airport improvement projects. For communities that rely on Essential Air Service, adopting NFPA standards without careful evaluation could further damage a program that is already under stress. These increased costs would be passed on to the traveling public at a time when many can least afford it.

A survey of 55 airports conducted by Airports Council International—North America (ACI-NA) in October found that the capital costs to comply with the NFPA standards would range between several thousand dollars and \$33 million, with the average cost of compliance being \$6.5 million. The responding airports also reported that the NFPA standards would increase their annual operating costs by between \$25,000 and \$10 million, with the average cost of compliance being \$2.5 million per year.

The American Association of Airport Executives (AAAE) has also been compiling information from airports around the country about the cost to comply with NFPA standards. Based on feedback the association has received from approximately 50 large, medium, small and non-hub airports, AAAE expects that the increased operating requirements could cost the airport industry as much as \$1 billion per year and \$4 billion in increased infrastructure and equipment costs.

Updates to the FAA ARFF standards have been evaluated by the Aviation Rulemaking Advisory Committee (ARAC), which allows *all* interested stakeholders, including airlines, pilot organizations, airports, the FAA and fire fighters to participate, and the final report is being sent to FAA. In addition, a study conducted under the well-respected Airport Cooperative Research Program (ACRP) on how proposed ARFF standards would impact airports will be released this summer. The FAA needs time to properly evaluate the information put forth by both the ARAC and the ACRP study to determine what, if any, changes are needed to the ARFF standards.

Please reject any efforts to include any language in the Senate version of the FAA Reauthorization Bill that would either legislate changes to the current ARFF standards or legislate that an unfair rulemaking process be undertaken to make changes in the standards. Instead, we urge you to allow the FAA to continue to work with aviation stakeholders as the ARAC process comes to a close and carefully review the ACRP report data.

Thank you for your leadership on aviation issues. We look forward to continuing our working relationship to ensure that our Nation's aviation system remains safe and secure.

Sincerely,

GREG PRINCIPATO,
President,
Airports Council International—North
America.

JAMES C. MAY,
President and CEO,
Air Transport Association.

CHARLES BARCLAY,
President,
American Association of Airport
Executives.

THOMAS E. ZOELLER,
President,
National Air Carrier Association.

JAMES C. COYNE,
President,
National Air Transport Association.

HENRY M. OGRODINSKI,
President and CEO,
National Association of State Aviation
Officials.

ROGER COHEN,
President,
Regional Airline Association.

CC: Hon. BYRON DORGAN
Hon. JIM DEMINT

PREPARED STATEMENT OF WILLIAM HORN ON BEHALF OF THE ALASKA PROFESSIONAL
HUNTERS ASSOCIATION

Mr. Chairman. The following statement is submitted for the record on behalf of the Alaska Professional Hunters Association (APHA). APHA represents professional guides, outfitters, and associated businesses providing outdoor recreation services in Alaska. APHA appreciates the opportunity to share its concerns and recommendations regarding the Federal Aviation Administration (FAA) reauthorization bill.

APHA applauds the Committee's efforts to overhaul Federal aviation. Our aviation system is at a pivotal moment in time, and APHA recognizes the importance of a modern and efficient air transportation system. Alaska, in particular, is highly dependent on aviation for transportation and business. Seventy percent of Alaska's communities are accessible only by boat or plane, and Alaska has three times as many pilots per capita than any other state. We trust that Congress will consider Alaska's unique aviation position as it pursues FAA legislation.

Since 1973, APHA has worked to ensure that hunters have reasonable access opportunities in Alaska. APHA's members promote economic opportunities in rural Alaska by providing well-paying jobs to residents. As you likely know, hunting areas in Alaska are usually remote, and APHA members rely on small aircraft to carry hunters to their destinations. APHA is concerned that some of the provisions in the FAA reauthorization bill, which are designed for conditions in the continental U.S., will impose undue, harmful burdens on Alaska hunting and fishing guide pilots.

Alaska guide pilots operate under Part 91 rules per a specific Congressional directive that codified agency practice and policy dating from the early 1960s (*i.e.*, provision of flight services incidental to hunting or fishing guide services did not require Part 135 certification). Although the FAA was authorized to establish special Part 91 rules for Alaska guide pilots, the agency has not used the authority.

Although most guide pilots operate under Part 91, some Alaska guides and outfitters also operate charter services governed by Part 135 rules. However, it is not uncommon to provide Part 135 services in the morning and incidental Part 91 services in the afternoon. The current House Reauthorization Bill would require pilots who fly back-to-back Part 91 and Part 135 trips to count their Part 91 flight time when calculating their needed Part 135 rest. APHA believes that this change would burden small carriers in Alaska, particularly hunting guides who count on the flexibility of Part 91 flights. The simple solution is to exclude Alaska guide pilots from this "piggy back" provision and instead have FAA establish rules for the enhanced Part 91 standards as authorized 9 years ago.

Prohibiting pilots from flying to their full capacity will only hurt business. Many of APHA's members are "mom and pop" companies who rely on one or two pilots to offer their services. By requiring inordinate amounts of downtime for Part 91 pilots, the FAA would unnecessarily hamper companies' ability to put planes in the air. The proposed rest requirements would prevent these companies from diversifying their operations thereby causing them undue economic harm.

APHA is also concerned that Air Tour Management Program provisions in the current House Reauthorization Bill are contrary to Alaska-specific air access guarantees enacted in 1980. In 1980, the Alaska National Interest Lands Conservation Act (ANILCA) (P.L. 96-487) directed that "notwithstanding any other provision of law" all National Park lands in Alaska are open to airplane access and can be closed only following a site specific determination that such access is harming unit resources. (See Section 1110(a); 16 U.S.C. 3170(a)). In 2000, Congress affirmed Alaska's access rights by exempting the State from participation in the air tour program when it passed The National Parks Air Tour Management Act.

In marked contrast, current House provisions would implement new requirements for the Air Tour Management Program which could broaden its scope to include Alaska. While the requirements are meant to mitigate noise and other adverse impacts in the continental U.S., they are contrary to the critical access guarantees enshrined in ANILCA. Moreover, these changes are likely to limit vital access to Federal lands in Alaska. Alaska's National Parks are of a scale much different from those in other states. There are 13 NPS areas in Alaska, 10 of which were created by ANILCA. These 13 parks have a total land area of nearly 50 million acres (almost four times larger than West Virginia) and constitute nearly 15 percent of Alaska.

The House bill contravenes section 1110(a) and would give the FAA too much latitude to limit overflights. In many cases, developing an FAA air management plan could be costly for businesses. Hunting guide operations and other small carriers do not have the funds to suspend operations during public comment periods or to engage in extensive environmental reviews required under the program. Furthermore, the Air Tour Management Program would be impractical in Alaska due to the large

number of small carriers forced to rely on the FAA's limited regional staff and resources. We encourage the Committee to recognize and honor the crucial access provisions in ANILCA and limit any park overflight restrictions to the other 49 states.

APHA stands ready to work with you and your staff to do whatever we may to help in your undertaking.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. MARIA CANTWELL TO
CHARLES M. BARCLAY, A.A.E.

Question. Mr. Barclay, how much thought have airports given to the infrastructure and operational requirements to support biofuels?

Answer. Airports around the county are working closely with their airline partners to reduce greenhouse gas emissions. For instance, the Seattle-Tacoma International Airport provides airlines with gate-side electricity to reduce fuel burn. The airport is also working with airlines to provide the necessary infrastructure to accommodate a larger number of electric-powered ground support equipment vehicles.

Airports look forward to collaborating with airlines, engine manufacturers and others that are exploring the use of sustainable biofuels in aviation as a way to reduce emissions and reliance on petroleum-based fuels. As you may know, Continental Airlines conducted the first biofuel-powered demonstration flight of a U.S. carrier earlier this year. According to Continental, the Boeing 737-800 used a "special fuel blend including components derived from algae and jatropha plants. . . ."

As airlines and engine manufacturers continue to make progress on using biofuels in aviation, airports are looking ahead to consider the infrastructure that may be necessary to accommodate the use of alternative fuels. The Airport Cooperative Research Program funded a project that will provide airports with a handbook to help them "evaluate the costs and benefits of providing a 'drop-in' alternative turbine engine fuel at airports, taking into account that such fuel may also be used for other purposes (e.g., ground vehicles, generators)."

Implementing the Next Generation Air Transportation System and building more runways, taxiways and other capacity-enhancing projects will also help reduce airline delays, unnecessary energy consumption and aircraft emissions. That is why AAAE is urging Congress to include provisions in the next FAA reauthorization bill that would raise the cap on Passenger Facility Charges to \$7.50, index the cap for inflation and increase Airport Improvement Program funding by at least \$100 million per year.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO
HON. MARION C. BLAKEY

Question 1. Where do you believe the FAA is with respect to developing a national strategy to accelerate the use of public Performance Based Navigation (PBN) procedures in both the terminal environment and en route airspace of the National Airspace System?

Answer. The FAA is currently not resourced to accelerate PBN implementation throughout the National Airspace System (NAS). The FAA's current strategy follows the NextGen Implementation Plan by incremental upgrades on a schedule to achieve full implementation in the 2020-2025 timeframe.

In order to accelerate implementation of PBN throughout the NAS, FAA's strategy needs to address a number of challenges including:

- Overall airspace redesign for en route airspace and OEP 35 metro areas (arrivals, departures, satellite airports) based on RNP containment concepts.
- Implementation of air traffic management tools to enable air traffic controllers to effectively manage aircraft on PBN paths.
- Changes to air traffic control procedures to permit the use of RNP flight procedures.
- New Methodology and tools to enable airspace usage and redesign for PBN.
 - A new methodology utilizing RNP containment in determining route spacing and aircraft separation.
 - New approaches to safety analysis of airspace operations that appropriately consider normal, and specified non-normal system performance, as well as suitable normal and limit conformance monitoring.

- A more expeditious process to translate and integrate the results of these analyses into the appropriate FAA procedures and processes so that operators can use PBN procedures.

Providing a process to incentivize operators to equip aircraft with advanced capabilities and to expend resources for procedures and training.

Question 2. As of the beginning of this year, how many U.S. airports have approaches that combine continuous descent and Required Navigation Performance (RNP) procedures in service?

Answer. The FAA can answer how many airports have CDA and RNP procedures in service. The real issue for industry is how many aircraft at those airports are able to use those approaches. While the FAA has done a commendable job of developing RNAV and Continuous Descent Arrival procedures in complicated airspace such as Atlanta, Dallas/Forth Worth, Washington, D.C. and Los Angeles, there are a number of reasons those procedures are not getting full use;

- It is difficult to employ RNP procedures at airports where some aircraft and crews are trained and equipped to perform the approaches and some are not.
- The benefits and efficiencies of RNP procedures accrue when a majority of operators are trained and equipped to use the procedures. At airports with a lot of different operators, no one wants to be the first to equip.
- There has also been insufficient justification for airlines to equip with required equipment because the FAA has not addressed how to give priority to equipped aircraft and qualified crews. FAA should change its service priority policy from “first come, first served” to “best equipped, best served”.

Question 3. What is involved in the design of a RNP procedure?

Answer. The design of an RNP procedure ranges from what is called, “cookie cutter implementation” to ones requiring much more detailed design and study before implementation. All designs must follow Terminal Instrument Procedures, or “TERPS” in laying out an RNP procedure in the terminal airspace or approach to a runway. This is easier at some airports than others. The task is more difficult and may take considerably longer to develop and implement when special considerations exist. Closely spaced parallel runways, an obstacle rich environment, high traffic density, challenging terrain and frequent adverse weather are all factors that can make the design of RNP procedures particularly difficult.

As with the introduction of previous new air traffic procedures, the experience with RNP has shown that the procedural design process is not the most difficult task. Operational success requires the choreography of new tasks that include new ATC controller and flight crew procedures and training, controller work rule changes, and final FAA operational approval.

Question 4. Realistically, how many RNP procedures do you believe the FAA can approve per year given its current level of resources?

Answer. FAA probably has the resources to implement approximately 300 new or updated instrument approach procedures per year. The development of RNAV and RNP procedures depends on the priority and balance of the work programs within the FAA flight procedure standards organization.

Question 5. Looking ahead, should the FAA prioritize the rollout of RNP procedures to our most congested airports?

Answer. The FAA should prioritize the rollout of RNP procedures where the value is the greatest, to include all phases of flight with emphasis on the terminal area and airport operations.

To facilitate an accelerated resolution of the issues identified in QFRs 1 and 2, we recommend that the FAA to commit to several targeted joint government/industry implementation projects to most effectively resolve operational issues. These should be targeted at specific operational areas (e.g., en-route, oceanic, terminal area departures, and terminal area arrivals) with each acceleration venue being structured to include all significant stakeholders.

Question 6. Does AIA support the use of third parties to design RNP procedures?

Answer. Yes, due to increasing demand for PBN procedures in the near future, AIA supports third party design followed by FAA certification.

Question 7. Are there standards for third-party RNP developers to design to?

Answer. Yes, the standards are essentially identical to those used by the FAA.

Question 8. Are RNP definitions, procedures, and naming conventions the same in the U.S. and in other regions of the world?

Answer. RNP definitions are the same. However, naming conventions have moved toward greater standardization but still differ slightly. This convergence continues as part of activities under the International Civil Aviation Organization’s Air Navi-

gation Bureau. The procedures are similar but differ in that the FAA uses TERPS criteria and other States use guidance and criteria from ICAO called PAN OPS.

Question 9. What issues related to RNP do you believe Congress should address in the reauthorization bill?

Answer. The reauthorization bill should direct FAA to move aggressively toward using RNP routinely in all phases of flight. To achieve this goal, the FAA should develop a phased transition plan to reach NAS-wide implementation. The plan should consider airspace design, aircraft capability, operator training and approvals, air traffic procedures, and realistic flow times that include infrastructure evolution, ground automation services, and air traffic controller processes, training and acceptance.

To accelerate implementation, FAA should participate in several targeted joint government/industry implementation projects to most effectively resolve operational issues. These should be targeted at specific operational areas (*e.g.*, en-route, oceanic, terminal area departures, terminal area arrivals) and each acceleration venue should be structured to include all significant stakeholders.

To gauge progress, FAA should establish appropriate metrics that measure operational use of RNP in the NAS and utilize this information through the transition period.

Question 10. What do you believe are the primary barriers for integrating UASs into our national airspace system?

Answer. Among the barriers to integration of UAS into the national airspace system is that requirements for access to the NAS vary widely by mission and aircraft. All stakeholders agree, however, that UAS should adhere to the same standards as other aircraft. To prevent artificial limitations on the use of these aircraft the FAA, industry and Congress must work together to address the challenges that these systems present to the certification and integration process.

Another challenge for UAS integration is that FAA has to certify different aircraft for different operations. This challenge is similar to what FAA confronted when the jet airplane was first introduced, but much more complex. AIA is committed to working with FAA to help identify and assess best methods for going forward on UAS certification, procedural, and operational challenges. AIA acknowledges FAA's efforts to advance certification and integration, but we believe that organizational structure could be improved for greater effectiveness. Moreover, AIA is pleased with FAA's willingness to consult with industry on these myriad UAS issues.

Given that the FAA has not experienced a complex challenge such as this since the advent of the jet engine, we applaud the FAA's establishment of the UAS Program Office. We recommend, however, the agency consider elevating the Program Office to a level with more authority, independence and NextGen-related focus.

Admittedly, a significant encumbrance to progress is the development of standards and guidance, which are the linchpin to UAS airspace access. While some progress has been made, we believe that continued industry-government cooperation can greatly accelerate the process. For example, AIA has encouraged FAA to organize standards development according to UAS size/weight categories. FAA successfully used this approach in setting civil aircraft standards. FAA recognized the value of this when it tasked a small UAS aviation rulemaking committee, whose report was recently released. Industry also believes progress would be amplified if FAA utilized all standards setting organizations in this endeavor.

Industry also recommends FAA review existing aircraft standards to determine their applicability to UAS. Once existing standards are evaluated, gaps that are identified can then be the focus of standards development efforts by the most appropriate organizations.

UAS issues exemplify the need to expedite NextGen which would facilitate integration of new vehicles into the NAS. Industry is encouraged that UAS are included in the NextGen testbed evaluations in Florida, and that NextGen has greater prominence within the Agency under the Senior Vice President of NextGen and Operations Planning. UAS inclusion in NextGen planning and development will facilitate identification of the appropriate research beyond just detect, sense and avoid capabilities.

Finally, the greatest barrier to UAS has been, and continues to be, lack of adequate funding for this FAA program. For the FAA to adequately meet the current and projected UAS demand, FAA needs assurance of dependable, dedicated funding and resources. Despite the FAA's efforts, the funding profile remains insufficient to support demand.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO
JAMES C. MAY

Question 1. As of the beginning of this year, how many U.S. airports have approaches that combine continuous decent and Required Navigation Performance (RNP) procedures in service?

Answer. None

Question 2. What equipage is required for commercial airlines to have RNP capability?

Answer. GPS and Flight Management System (FMS) upgrades.

Question 3. Which commercial aircraft airlines currently incorporate RNP procedures?

Answer. Among ATA-member airlines, Delta, American, Continental and Alaska.

Question 4. Looking ahead, should the FAA prioritize the rollout of RNP procedures to our most congested airports?

Answer. RNP procedures should be rolled out at airport and runway configurations where they can provide the most benefit.

Question 5. What is the difference between public and private RNP?

Answer. Private procedures are developed and available for use by a single carrier. Public procedures may be used by anyone.

Question 6. Do you believe the FAA has the in-house capability to meet the demand for RNP procedures?

Answer. We do not believe FAA has the human resources necessary to meet the demand for new RNP procedures in a timely manner.

Question 7. Does ATA support the use of third parties to design RNP procedures?

Answer. ATA supports the use of qualified third parties to design RNP procedures in accordance with FAA standards. There are a number of entities qualified to do this work, which would allow FAA to use its own resources to review/approve procedures designed by third-parties in addition to designing RNP procedures itself.

Question 8. Are there standards for third-party RNP developer to design to?

Answer. Yes. FAA makes available its standards for developing RNP procedures.

Question 9. Are RNP definitions, procedures, and naming conventions the same in the U.S. and in other regions of the world?

Answer. Yes.

Question 10. What issues related to RNP do you believe Congress should address in the reauthorization bill?

Answer. Funding for aircraft equipage, FAA staffing for certification of equipment and development of procedures, and allowing FAA to use third parties to develop procedures.

Question 11. What do you see as the strengths and weaknesses of the Commercial Aviation Alternative Fuels Initiative?

Answer. CAAFI's primary strength is that it pulls together the expertise and collective will of a broad and engaged swath of stakeholders who hold most of the keys to development and deployment of commercially viable, environmentally friendly alternative jet fuels. Before ATA co-founded CAAFI with others in 2006, most of the stakeholder efforts in aviation alternative fuels were individual efforts. While individual, entrepreneurial efforts remain critically important, these efforts are leveraged through the coordination and focus that CAAFI provides. Specifically, CAAFI's four teams—(1) research and development; (2) certification/qualification; (3) environment; and (4) business—have developed and are executing roadmaps to get over the hurdles in each of these areas. Through these roadmaps, the range of stakeholders, including airlines, airports, airframe and engine manufacturers, government agencies, would-be alternative fuel suppliers, universities, etc., are able to deploy resources where needed most and to minimize duplicative efforts.

To the extent CAAFI has a "weakness," it is in the fact that aviation alternative fuels do not appear to be a high priority for policymakers, making it more difficult to get financial and other support for aviation-fuel-specific research, development and deployment projects. While CAAFI functions primarily based on the intellectual capital and in-kind resources provided by its sponsors and supporters, test programs, environmental analyses and other research and development activities require significant funding. Also, to make second-generation bio-feedstocks for alternative jet fuel production price competitive in early years, some level of Federal support likely will be needed. While fuels for ground-based transportation sources (such as motor vehicles) have been successful in obtaining such Federal support, it is more difficult for aviation given that we represent a smaller fuel user group and alternative jet fuels are a "higher hurdle" in light of our rigorous fuel standards. As an

umbrella group, CAAFI can advocate for such support. However, it must ultimately be up to the policymakers to provide appropriate funding to complement our efforts.

Question 12. What gaps do you see in the Federal Government's current efforts to support the development of aviation biofuels that can pass the FAA's airworthiness requirements?

Answer. Both FAA and the Air Force have been invaluable contributors to commercial aviation's efforts to develop and deploy alternative jet fuels. As head of CAAFI's certification/qualification team, FAA continues to work closely with stakeholders on the pending and upcoming efforts to revise the jet fuel specification (which is maintained by ASTM International) and to have approved jet fuel specifications recognized under FAA equipment certifications. Significantly, to the extent that we can develop an alternative jet fuel that meets the jet fuel specification, is virtually indistinguishable from petroleum-based jet fuel and can be "dropped in" to existing aircraft engines and fuel distribution systems, FAA has worked out an approach that should prevent the airlines from having to re-certify each, individual aircraft to use that approved fuel. (Should this approach not be taken, however, an aircraft-by-aircraft certification approach would almost certainly doom our efforts to deploy alternative jet fuels.)

The Air Force, which is undertaking its own alternative fuels test program, has worked with us closely to help leverage our efforts, through appropriate data-sharing and other cooperative efforts.

In spite of the close cooperation and coordination the commercial airlines have with FAA and the Air Force, there still are challenges to getting alternative jet fuels through the approval process. The first challenge is in the nature of the jet fuel specification revision process under ASTM International. While this international standard-setting body brings together the necessary expertise to ensure the safety of jet fuel, the process can be slow, particularly given the presence of some petroleum company representatives who may have conflicting interests with respect to non-petroleum-based fuels. The second challenge, which can be related to the first, is the availability of funding to generate significant quantities of alternative jet fuel needed for the testing process. Here is where additional Federal support and funding would help. In light of the rigorous safety standards that jet fuel must meet (for example, it must withstand very cold temperatures at altitude), alternatives must go through even more rigorous testing than fuels for ground-based units. And yet the vast majority of Federal funding for test programs goes to testing for ground-based units. Further support for jet fuel test programs is warranted and would be helpful both for the ASTM International specification and FAA's equipment certification processes.

Question 13. What do you believe are the primary barriers for integrating UASs into our national airspace system?

Answer. We do have concerns, primarily related to safety, about UASs operating in the national airspace system. Our concerns center on the reliability of UASs, command and control procedures—in terms of safety and security, protocols for recovery or destruction of UASs in the event control is lost, and integration into airline collision avoidance systems (TCAS). The RTCA has created a committee to examine integration on UASs into the national airspace system, and we look forward to its recommendations.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARK BEGICH TO
JAMES C. MAY

Question 1. Mr. May, in your written testimony submitted to the Subcommittee, page 7 cites cost-benefits associated with implementing *NowGen*. Specifically, Mr. May's testimony cites \$12 billion in U.S. economic benefits, including \$7.4 billion alone in job creation. How did ATA arrive at these numbers?

Answer. The referenced economic benefits associated with *NowGen* are cumulative over the period 2009–2012 and derive from reduced FAA costs, improved access to general aviation airports, operating efficiencies, and U.S. job creation.

Question 2. Mr. May, in your testimony you reference a Joint Economic Committee finding that domestic delays in 2007 resulted in costs of \$41 billion to industry and passengers. What specific factors comprise the \$41 billion/year in delay costs that you reference in your testimony? How do delays impact the airline industry?

Answer. With respect to 2007 delays, the Joint Economic Committee report breaks down the \$41 billion figure as follows: \$19 billion in increased operating costs to airlines, \$12 billion in terms of lost time/productivity to passengers, and \$10 billion in indirect costs to businesses that rely on and/or service the airline industry.

Delays affect airlines in many ways. As the report notes, delays drive additional crew time, use of replacement crews, overtime for ground personnel, cancellations, and increased fuel consumption. Delays also increase the challenge of prompt baggage handling and delivery. The ripple effect alters operations at down-line stations, forcing delays, cancellations, and rerouting of aircraft and crews. Finally, delays adversely affect customer good-will, which airlines work very hard at to develop and maintain.

Question 3. If industry will see a significant financial benefit from decreased delays, in the opinion of ATA, can the money saved by industry be reinvested in the deployment of NextGen capabilities for the national airspace?

Answer. In our view, the General Fund should pay for the deployment of NextGen technology as part of the Nation's investment in critical national infrastructure systems. The air traffic control system operated by the FAA, including airborne components, is no less a critical national infrastructure system than the interstate highway system; its benefits flow across the entire nation and U.S. industries. The reduced costs from reduced delays will enable airlines to fund their normal operating costs and capital investment needs. Today, U.S. airlines face a tremendous revenue problem due to the weak economy. U.S. airlines lost \$9.5 billion in 2008, and they will suffer another multi-billion dollar loss in 2009—particularly given the return of speculation-driven oil prices that now hover around \$70 per barrel. The airline industry remains in survival mode, as it has throughout this decade.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. MARIA CANTWELL TO
ED BOLEN

Question. What gaps do you see in the Federal Government's current efforts to support the development of aviation biofuels that can pass the FAA's airworthiness requirements?

Answer. There is a need for additional testing of "prototype" biofuels by FAA and NASA. Once a viable prototype is identified, government support for large-scale production of a "test run" volume of fuel is needed.

